



STIC Search Report

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STIC Database Tracking Number: 164165

TO: Michael T Brannock
Location: REM/4D74/4C70
Art Unit: 1649

Sept 2, 2005

Case Serial Number: 09/640582

From: P. Sheppard
Location: Remsen Building
Phone: (571) 272-2529

sheppard@uspto.gov

Search Notes

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164165

From: Brannock, Michael
Sent: Monday, August 29, 2005 10:58 AM
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Please provide a search of SEQ ID NO: 1 against pending, issued, and published databases.

Thank you

Michael T. Brannock, Ph.D.
Patent Examiner, AU 1649
USPTO Remsen Bld. 4D74
(571) 272-0869
Mail-Box: 4C70

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Searcher: _____
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Type of Search

NA#: _____ AA#: _____
Interference: _____ SPDI: _____
S/L: _____ Oligomer: _____
Encode/Transl: _____
Structure#: _____ Text: _____
Inventor: _____ Litigation: _____

Vendors and cost where applicable

STN: _____
DIALOG: _____
QUESTEL/ORBIT: _____
LEXIS/NEXIS: _____
SEQUENCE SYSTEM: _____
WWW/Internet: _____
Other(Specify): _____

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OM nucleic - nucleic search, using sw model

Run on: August 30, 2005, 19:53:43 ; Search time 218 Seconds
(without alignments)
10072.855 Million cell updates/sec

Title: US-09-640-582A-1

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Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 8181359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA: *
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6: /cgn2_6/ptodata/1/ina/backfile1.seq: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1298.6	96.8	3235	US-09-949-016-1392	Sequence 1392, Ap
2	1297	96.6	3372	US-09-949-016-165	Sequence 165, App
3	1207	89.9	1792	US-09-086-436-40	Sequence 40, Appl
4	1194.4	89.0	1790	US-08-997-685A-11	Sequence 11, Appl
5	927.2	69.1	4276	US-09-949-016-4900	Sequence 4900, App
6	927.2	69.1	5065	US-09-949-016-744	Sequence 744, App
7	874.2	65.1	1512	US-09-086-436-32	Sequence 32, Appl
8	871	64.9	1584	US-08-997-685A-3	Sequence 3, Appl
9	751.8	56.0	2976	US-08-974-528-317	Sequence 317, App
10	735.2	54.8	2733	US-08-997-685A-1	Sequence 1, Appl
11	706	52.6	1518	US-09-086-436-34	Sequence 34, Appl
12	688.8	51.3	1507	US-08-997-685A-5	Sequence 5, Appl
13	680.2	50.7	2246	US-09-086-436-38	Sequence 38, Appl
14	680.2	50.7	2263	US-08-997-685A-9	Sequence 9, Appl
15	680.2	50.7	3224	US-09-774-528-238	Sequence 238, App
16	666.6	49.7	1307	US-09-172-422-3	Sequence 3, Appl
17	331.8	24.7	1083	US-09-270-767-1038	Sequence 1038, App
18	331.8	24.7	1083	US-09-270-767-16320	Sequence 16320, A
19	285.6	21.3	31467	US-09-949-016-13134	Sequence 13134, A
20	285.6	21.3	31868	US-09-949-016-11907	Sequence 11907, A
21	221.6	16.5	601	US-09-949-016-21135	Sequence 21135, A
22	221.6	16.5	601	US-09-949-016-47503	Sequence 47503, A
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26	211	15.7	601	US-09-949-016-47522	Sequence 47522, A
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C 33	164.4	12.3	601	US-09-949-016-21121	Sequence 21121, A
C 34	164.4	12.3	601	US-09-949-016-47489	Sequence 47489, A
C 35	151	11.3	601	US-09-949-016-21142	Sequence 21142, A
C 36	151	11.3	601	US-09-949-016-47510	Sequence 47510, A
C 37	128	9.5	601	US-09-949-016-21141	Sequence 21141, A
C 38	128	9.5	601	US-09-949-016-47509	Sequence 47509, A
C 39	123.6	9.2	1040	US-09-086-436-36	Sequence 36, Appl
C 40	110	8.2	1060	US-08-997-685A-7	Sequence 7, Appl
C 41	102.6	7.6	3480	US-09-226-012-1	Sequence 1, Appl
C 42	102.6	7.6	3950	US-09-226-012-3	Sequence 3, Appl
C 43	94	7.0	601	US-09-949-016-21122	Sequence 21122, A
C 44	94	7.0	601	US-09-949-016-47490	Sequence 47490, A
C 45	86.6	6.5	3249	US-09-358-383C-3	Sequence 3, Appl

ALIGNMENTS

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RESULT 1
US-09-949-016-1392
; Sequence 1392, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: C0001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1392
; LENGTH: 3235
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-1392

Query Match          96.8%; Score 1298.6; DB 4; Length 3235;
Best Local Similarity 99.1%; Pred. No. 1.9e-257;
Matches 1329; Conservative 7; Mismatches 2; Indels 3; Gaps 3;

4 TGGGCTTACCAAGATCTCAGCCTCTGCGGCTGTGCGCCTTCATCGCTATCCGCT 63
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64 ACATCCATCAGTGGAGAGATCTTCACATGACCTATGACCTGGCCAGGCGGTATGA 123
935 ACATCCATCAGTGGAGAGATCTTCACATGACCTATGACCTGGCCAGGCGGTATGA 994
124 GAATTCGATCTCATCAGCATGATGCTGCTGCTGCGCCTGGAGCGGCTGCTGAGT 183
995 GAATTCGATCTCATCAGCATGATGCTGCTGCTGCGCCTGGAGCGGCTGCTGAGT 1054
184 TCCTGTGCCCATCTGTCAGAGACTTCCGCGCACTGCTGGAGTGCATCATGCGATG 243
1055 TCCTGTGCCCATCTGTCAGAGACTTCCGCGCACTGCTGGAGTGCATCATGCGATG 1114
244 TGAACCACTGTGTGAGTGAATCTACTCTTGGCATCTTTCAAGGCCATAGCCATGCG 303
1115 TGAACCACTGTGTGAGTGAATCTACTCTTGGCATCTTTCAAGGCCATAGCCATGCG 1174
304 TGTGCACTGGGTACGGCGCGGCGCGGCGGAGAGCATGAGCATCTGTGCTGACCATGC 363
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Db 1175 TGTGATCGGGTACGGCGGAGCGCGCCGAGACATGACGACATCTGGCTGACATGCG 1234
Qy 364 TCACATGATATGTTGGTGGCCGCTGTACAGGATGTCATGGGACAGCCATCCCTCA 423
Db 1235 TCACATGATATGTTGGTGGCCGCTGTACAGGATGTCATGGGACAGCCATCCCTCA 1294
Qy 424 TCCAGTGGCTGGATCTCTCGGGGGCCAGTACAGAGAAATTAAGAGAGTGAAGCACT 483
Db 1295 TCCAGTGGCTGGATCTCTCGGGGGCCAGTACAGAGAAATTAAGAGAGTGAAGCACT 1354
Qy 484 ACATGTCTTCCACAGCTGCGAGCTGACTTCCGCGAGAGATCCAGACTACTATGAGC 543
Db 1355 ACATGTCTTCCACAGCTGCGAGCTGACTTCCGCGAGAGATCCAGACTACTATGAGC 1414
Qy 544 ACCGTTACAGGGGCAAGATGTTTGAAGAGACAGCATCTGGGCGAGCTCAACGGGCCCC 603
Db 1415 ACCGTTACAGGGGCAAGATGTTTGAAGAGACAGCATCTGGGCGAGCTCAACGGGCCCC 1474
Qy 604 TCGCGGAGAGATGCTCAACTTCAACTGCGGAAAGCTGGTGGCTTCCATGCGCGTGTTCG 663
Db 1475 TCGCGGAGAGATGCTCAACTTCAACTGCGGAAAGCTGGTGGCTTCCATGCGCGTGTTCG 1534
Qy 664 CCAACGCCGACCCCACTTCTGTCACGGGCTATGTCGACCAAGCTCAAGTTCCAGGCTTCC 723
Db 1535 CCAACGCCGACCCCACTTCTGTCACGGGCTATGTCGACCAAGCTCAAGTTCCAGGCTTCC 1594
Qy 724 AGCGGGGTGATCACTATCCGCGAAGGACCATCGGGAAAGATGTAATTCAATCCAGC 783
Db 1595 AGCGGGGTGATCACTATCCGCGAAGGACCATCGGGAAAGATGTAATTCAATCCAGC 1654
Qy 784 ACGGGTGTGAGCGTGTCTACTAAAGGCAACAAGAGATGAAGTGTCCATGGCTCT 843
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Qy 844 ACTTCGGGGAGATGTCGCTGTCACCGGGGGCGCGGACGGCGAGCGTGGGGGTGACA 903
Db 1715 ACTTCGGGGAGATGTCGCTGTCACCGGGGGCGCGGACGGCGAGCGTGGGGGTGACA 1774
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Db 1775 CCTACTGCGGCTCTAATTGCGTGAAGCGGAGCAACTTCAAGAGTGTGAGAGATACC 1834
Qy 964 CCATGATGCGGCGGCTTTCAGACGATGGCCATGACCGGCTGGACCGCATCGGCAAGA 1023
Db 1835 CCATGATGCGGCGGCTTTCAGACGATGGCCATGACCGGCTGGACCGCATCGGCAAGA 1894
Qy 1024 AGAATTCATCTCTGTCACAAGGTGTGACATGACTCACTCGGGGCTATTCAACAAC 1083
Db 1895 AGAATTCATCTCTGTCACAAGGTGTGACATGACTCACTCGGGGCTATTCAACAAC 1954
Qy 1084 AGAGAACGCAATCCAGAGATGTGAAGTGAACCGCGAGATGTGACAGAGCGG 1143
Db 1955 AGAGAACGCAATCCAGAGATGTGAAGTGAACCGCGAGATGTGACAGAGCGG 2014
Qy 1144 AGTGGGCTCAAGCGGCTCTTTCGCGCGCGCGCGCGCGCGCGCA-GTCACTCG 1202
Db 2015 AGTGGGCTCAAGCGGCTCTTTCGCGCGCGCGCGCGCGCGCGCGCACTCG 2073
Qy 1203 GGCATGCGCAGCGTTCAGACAGGCGGCGCATGAGACTTTCGCGCGCA-GTGGCGGCGCG 1261
Db 2074 GGCATGCGCAGCGTTCAGACAGGCGGCGCATGAGACTTTCGCGCGCACTGGCGGCGG 2133
Qy 1262 CTCGTGGGGCGGCTGGCGCTCGCGCGCTCGTGGCGGCGGCGGCGGCGGCGG 1321
Db 2134 CTCGTGGGGCGGCTGGCGCTCGCGCGCTCGTGGCGGCGGCGGCGGCGGCGGCGG 2193
Qy 1322 GCACCTGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 2194
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4 RESULT 2

US-09-949-016-165
Sequence 165 Application US/09949016
Patent No 681239
GENERAL INFORMATION:
APPLICANT: VENTURE, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: C1001307
CURRENT APPLICATION NUMBER: US/09/949, 016
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 165
LENGTH: 3372
TYPE: DNA
ORGANISM: Human
US-09-949-016-165

Query Match 96.6%; Score 1297; DB 4; Length 3372;
Best Local Similarity 99.0%; Pred. No. 4; Le-257;
Matches 1328; Conservative 7; Mismatches 3; Indels 3; Gaps 3;
Qy 4 TGCCTTCACCAAGATCTCAGGCTCTCGGCGTGGCTGCGCTCTGACGCTGATCGCT 63
Db 1012 TGCCTTCACCAAGATCTCAGGCTCTCGGCGTGGCTGCGCTCTGACGCTGATCGCT 1071
Qy 64 ACATCCATCAGTGGAGAGATCTTCCACATGACTATGACTGAGCGCGGATGATGA 123
Db 1072 ACATCCATCAGTGGAGAGATCTTCCACATGACTATGACTGAGCGCGGATGATGA 1131
Qy 124 GGATTCGATCTCATAGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 183
Db 1132 GGATTCGATCTCATAGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1191
Qy 184 TCCGTGGCCCATGCTGAGAGACTTCCGCGCAACTGCTGGGTGTCATTAATGGCATGG 243
Db 1192 TCCGTGGCCCATGCTGAGAGACTTCCGCGCAACTGCTGGGTGTCATTAATGGCATGG 1251
Qy 244 TGAACCACTGTGAGAGAACTGTAATCTTCCGCACTTCCAGAGCCATGAGCCACATGC 303
Db 1252 TGAACCACTGTGAGAGAACTGTAATCTTCCGCACTTCCAGAGCCATGAGCCACATGC 1311
Qy 304 TGTGATCGGGTACGGCGGCGGCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 363
Db 1312 TGTGATCGGGTACGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1371
Qy 364 TCAAGATGATTTGGTGGTGCACCTGTGACGCAATGTTCAATGGCCACGCACTGCTCA 423
Db 1372 TCAAGATGATTTGGTGGTGCACCTGTGACGCAATGTTCAATGGCCACGCACTGCTCA 1431
Qy 424 TCCAGTGGCTGACTCTCTCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 483
Db 1432 TCCAGTGGCTGACTCTCTCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1491
Qy 484 ACATGTCTTTCACCAAGCTGCACTGCTTCCGCGGAGAGATCCAGACTATATGAGC 543
Db 1492 ACATGTCTTTCACCAAGCTGCACTGCTTCCGCGGAGAGATCCAGACTATATGAGC 1551
Qy 544 ACCGTTACAGGGGCAAGATGTTTGAAGAGACAGCATCTGGGCGAGCTCAACGGGCCCC 603
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Qy 604 TCGCGGAGAGATGTCATCTTCACTGCGGAAAGTGTGGCTCCATGCGGCTGTTCG 663
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Qy 664 CCAACGCCGACCCCACTTGTGTCAGGCGCATGTCGACCAAGTCAAGTTGAGAGTCTTCC 723

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Db      1732  AGCGGGGTGACTACATCATCCGCGAAGGACCATGGGAAAGATGATTCATCCAGC 1791
Qy      784  AGCGGGGTGACTACATCATCCGCGAAGGACCATGGGAAAGATGATTCATCCAGC 843
Db      1792  AGCGGGGTGACTACATCATCCGCGAAGGACCATGGGAAAGATGATTCATCCAGC 1851
Qy      844  ACTTCGGGAGATCTGCTGTCTGACCCGCGGCGCGCGACGCGAGCTGCGGGCTGACA 903
Db      1852  ACTTCGGGAGATCTGCTGTCTGACCCGCGGCGCGCGACGCGAGCTGCGGGCTGACA 1911
Qy      904  CCTACTGCGGCTCTATTCGCTGAGCGGAGCAATTTCAAGAGTGTGTGAAGAGTACC 963
Db      1912  CCTACTGCGGCTCTATTCGCTGAGCGGAGCAATTTCAAGAGTGTGTGAAGAGTACC 1971
Qy      964  CCATGATGCGGCGGCTTTCGAGACGCGTGCATCGACCGCTGGACCGCATCGGCAAGA 1023
Db      1972  CCATGATGCGGCGGCTTTCGAGACGCGTGCATCGACCGCTGGACCGCATCGGCAAGA 2031
Qy      1024  AGAATTCATCTCTCTGCAACAAGGTGACATGACTCACTCGGCGGTATTCACAACC 1083
Db      2032  AGAATTCATCTCTCTGCAACAAGGTGACATGACTCACTCGGCGGTATTCACAACC 2091
Qy      1084  AGGAGAAAGCCATCATTCAGAGATGCTCAAGTACAGACCGGAGATGTGTGACGAGCGG 1143
Db      2092  AGGAGAAAGCCATCATTCAGAGATGCTCAAGTACAGACCGGAGATGTGTGACGAGCGG 2151
Qy      1144  AGCTGGGCTCAAGCGGCTGCTCTTCCGCGCGCGCGCGCGCGCGCA-GTCACTCG 1202
Db      2152  AGCTGGG-TCAGCGGCTGCGCTCTTCCGCGCGCGCGCGCGCGCGCGCACTCG 2210
Qy      1203  GCCATCGCCACGCTGACAGACGCGCGGCGCATGAGCTTCTGCCGCA-GTGGCGGCGG 1261
Db      2211  GCCATCGCCACGCTGACAGACGCGCGGCGCATGAGCTTCTGCCGCAAGTGGCGGCGG 2270
Qy      1262  CTCGGGGGCGCGCTGCGGCTGCGGCTGCGGCGCGCGCGCGCHGYNDYHCCCGGSGCC 1321
Db      2271  CTCGGGGGCGCGCTGCGGCTGCGGCTGCGGCGCGCGCGCGCGCGCGCGCGCGCGCC 2330
Qy      1322  GCACCTGCGGCMCTCAACC 1342
Db      2331  GCACCTGCGGCGCGCTCAACC 2351

RESULT 3
US-09-086-436-40
; Sequence 40, Application US/09086436
; Patent No. 6703485
; GENERAL INFORMATION:
; APPLICANT: Kandel, Eric R.
; APPLICANT: Satoro, Dana
; APPLICANT: Bartsch, Susan
; APPLICANT: Siegelbaum, Steven
; APPLICANT: Tibbs, Gareth
; APPLICANT: Grant, Seth
; TITLE OF INVENTION: Brain or Heart Cyclic Nucleotide Gated Ion Channel and
; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: 0575/54806-A
; CURRENT APPLICATION NUMBER: US/09/086,436
; CURRENT FILING DATE: 1998-05-28
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 40
; LENGTH: 1792
; TYPE: DNA
; ORGANISM: Human
US-09-086-436-40

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Best Local Similarity 99.0%; Pred. No. 1,1e-238;
Matches 1235; Conservative 0; Mismatches 11; Indels 2; Gaps 2;

Qy      4  TGGCCTTACCAAGATATCTGAGCTCTTGGGCTGCTGCGGCTTCAAGCTGATCCGCT 63
Db      541  TGGCCTTACCAAGATATCTGAGCTCTTGGGCTGCTGCGGCTTCAAGCTGATCCGCT 600
Qy      64  ACATCCATAGTGGAGAGATCTTCCACATGACCTTATGACCTGGGACGCGGTGATGA 123
Db      601  ACATCCATAGTGGAGAGATCTTCCACATGACCTTATGACCTGGGACGCGGTGATGA 660
Qy      124  GGATCTGCAATCTGATGAGATGATGCTGCTCTGCTGCTGCACTGGGACGCTGCTGAGT 183
Db      661  GGATCTGCAATCTGATGAGATGATGCTGCTGCTGCTGCTGCTGCACTGGGACGCTGAGT 720
Qy      184  TCCCTGGGCCCATGCTGACAGAGCTTCCCGGCAACTGCTGGGTGCTCATGATGAGTGG 243
Db      721  TCCCTGGGCCCATGCTGACAGAGCTTCCCGGCAACTGCTGGGTGCTCATGATGAGTGG 780
Qy      244  TGAACCACTGCTGAGAGTGAATGTAATCTTCTGCACTCTTCAAGGCGCATGAGCCATGTC 303
Db      781  TGAACCACTGCTGAGAGTGAATGTAATCTTCTGCACTCTTCAAGGCGCATGAGCCATGTC 840
Qy      304  TGTGCACTGCGGTACGCGCGGCGCGCGCGCGCGAGAGCATGACGATCTGCTGACATGC 363
Db      841  TGTGCACTGCGGTACGCGCGGCGCGCGCGCGCGAGAGCATGACGATCTGCTGACATGC 900
Qy      364  TCAGCATGATTTGGGTCGCACTGCTGACGCGCATGCTTCACTGGGACGCACTGCTTCA 423
Db      901  TCAGCATGATTTGGGTCGCACTGCTGACGCGCATGCTTCACTGGGACGCACTGCTTCA 960
Qy      424  TCCAGTGGCTGAGACTCTGCGGCGCGCGCGCGCGCGCGAGTACAGAGATGACAGAGTGA 483
Db      961  TCCAGTGGCTGAGACTCTTCCGCGCGCGCGCGCGCGCGCGAGTACAGAGATGACAGAGT 1020
Qy      484  ACATGCTCTTCCACAGCTGCGAGCTGACTTCCGCGAGAGATGACAGATGACTATGAGC 543
Db      1021  ACATGCTCTTCCACAGCTGCGAGCTGACTTCCGCGAGAGATGACAGATGACTATGAGC 1080
Qy      544  ACCGTTACAGGAGGAAATGTTTGAAGAGACAGATCCCTGGGAGACTCAACGGGCGCC 603
Db      1081  ACCGTTACAGGAGGAAATGTTTGAAGAGACAGATCCCTGGGAGACTCAACGGGCGCC 1140
Qy      604  TGGGAGAGAGATGTCACATTCACATGCGGAGAGCTGGGCTCATGCGGCTGTTGG 663
Db      1141  TGGGAGAGAGATGTCACATTCACATGCGGAGAGCTGGGCTCATGCGGCTGTTGG 1200
Qy      664  CCAACGCGGACCCCACTTGTGTCAGCGCATGCTGACCAAGCTCAAGTTGAGGTTCTTCC 723
Db      1201  CCAACGCGGACCCCACTTGTGTCAGCGCATGCTGACCAAGCTCAAGTTGAGGTTCTTCC 1260
Qy      724  AGCGGGGTGACTACATCATCCGCGAAGGACCATGGGAAAGATGATTCATCCAGC 783
Db      1261  AGCGGGGTGACTACATCATCCGCGAAGGACCATGGGAAAGATGATTCATCCAGC 1320
Qy      784  AGCGGGGTGACTACATCATCCGCGAAGGACCATGGGAAAGATGATTCATCCAGC 843
Db      1321  AGCGGGGTGACTACATCATCCGCGAAGGACCATGGGAAAGATGATTCATCCAGC 1380
Qy      844  ACTTCGGGAGATCTGCTGTCTGACCCGCGGCGCGCGACGCGAGCTGCGGGCTGACA 903
Db      1381  ACTTCGGGAGATCTGCTGTCTGACCCGCGGCGCGCGCGAGCTGCGGGCTGACA 1440
Qy      904  CCTACTGCGGCTCTATTCGCTGAGCGGAGCAATTTCAAGAGTGTGTGAAGAGTACC 963
Db      1441  CCTACTGCGGCTCTATTCGCTGAGCGGAGCAATTTCAAGAGTGTGTGAAGAGTACC 1500
Qy      964  CCATGATGCGGCGGCTTTCGAGACGCGTGCATCGACCGCTGGACCGCATCGGCAAGA 1023
Db      1501  CCATGATGCGGCGGCTTTCGAGACGCGTGCATCGACCGCTGGACCGCATCGGCAAGA 1560
Qy      1024  AGAATTCATCTCTCTGCAACAAGGTGACATGACTCACTCGGCGGTATTCACAACC 1083

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US-09-949-016-4900

Query Match 69.1%; Score 927.2; DB 4; Length 4276;
Best Local Similarity 84.7%; Pred. No. 3.6e-181;
Matches 1040; Conservative 0; Mismatches 188; Indels 0; Gaps 0;

QY 4 TGGCGTTTACCAAGATCTGAGCTCTGCGGCTGCTGCGCTCTGAGCTGATCCGCT 63
DB TCCCTTACCAAGATCTGAGCTCTGAGCTCTGAGCTCTGAGCTCTGAGCTCTGAGCT 908
QY 64 ACATCCAGTGGAGAGAGATCTTCCATGACCTAGACCTGAGCTGAGCTGAGCTGAGCT 123
DB ATATTCACAGTGGAGAGAGATCTTCCATGACCTAGACCTGAGCTGAGCTGAGCTGAGCT 968
QY 124 GGATCTGCAATCTCATGACATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 183
DB GCATCTGCAATCTCATGACATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1028
QY 184 TCTGTGTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 243
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QY 364 TCAGCATGATGTTGGTGGCCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 423
DB TCAGCATGATGTTGGTGGCCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1208
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DB ACATGTCCTTCCAGAGTGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1328
QY 544 ACCGCTTACCAAGAGATGTTTGAACGAGACATCTGCGGAGCTGCTGCTGCTGCTGCT 603
DB ACCGCTTACCAAGAGATGTTTGAACGAGACATCTGCGGAGCTGCTGCTGCTGCTGCTGCT 1389
QY 604 TGGCGGAGAGATGCTCACTTCACTGCGGAGAGTGGTGGCTGCTGCTGCTGCTGCTGCT 663
DB TGGCGGAGAGATGCTCACTTCACTGCGGAGAGTGGTGGCTGCTGCTGCTGCTGCTGCTGCT 1449
QY 664 CCAAGCGGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 723
DB CCAAGCGGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1509
QY 724 AGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 783
DB AGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1569
QY 784 AGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 843
DB AGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1629
QY 844 ACTTGGGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 903
DB ACTTGGGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1689
QY 904 CTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 963
DB CTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1749
QY 964 CCATGATGCGGCGGCTTTCAGACGCTGCGCATGACCGCTGCGCATGCGCATGCGCATG 1023
DB CCATGATGCGGCGGCTTTCAGACGCTGCGCATGACCGCTGCGCATGCGCATGCGCATG 1809

QY 1024 AGAATTCATCTCTCTGACAGAGTGCAGATGACCTCAATGCGGCTGATTAACAACC 1083
DB AGAATTCATCTCTCTGACAGAGTGCAGATGACCTCAATGCGGCTGATTAACAACC 1928
QY 1084 AGGAAAGCCATCATCATCAGAGATGCTCAAGTACGACGCGAGAGTGTGACAGAGCCG 1143
DB AGGAAAGCCATCATCATCAGAGATGCTCAAGTACGACGCGAGAGTGTGACAGAGCCG 1928
QY 1144 AGCTGGGCTGAGGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1203
DB AGCTGGGCTGAGGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2048
QY 1204 CCATGCGCAGCTGACAGCAGGCGGCGG 1231
DB CCATGCGCAGCTGACAGCAGGCGGCGG 2076

RESULT 6

US-09-949-016-744
Sequence 744, Application us/09949016
Patent No. 6812339

GENERAL INFORMATION:
APPLICANT: VENTUR, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: C1001307
CURRENT APPLICATION NUMBER: US/09/949,016

PRIOR FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012

SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 744

LENGTH: 5065
TYPE: DNA
ORGANISM: Human

US-09-949-016-744

Query Match 69.1%; Score 927.2; DB 4; Length 5065;
Best Local Similarity 84.7%; Pred. No. 3.8e-181;
Matches 1040; Conservative 0; Mismatches 188; Indels 0; Gaps 0;

QY 4 TGGCGTTTACCAAGATCTGAGCTCTGCGGCTGCTGCGCTGCTGCTGCTGCTGCTGCTGCT 63
DB TCCGCTTACCAAGATCTGAGCTCTGAGCTCTGAGCTCTGAGCTCTGAGCTCTGAGCTCT 1755
QY 64 ACATCCATGAGAGAGATCTTCCATGACCTGATGACCTGCGGAGCGGCTGATGA 123
DB ACATCCATGAGAGAGATCTTCCATGACCTGATGACCTGCGGAGCGGCTGATGA 1815
QY 124 GGATTCGATCTCATGACATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 183
DB GGATTCGATCTCATGACATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1875
QY 184 TCTGTGTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 243
DB TCTGTGTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1935
QY 1876 TCTGTGTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1935
DB TCTGTGTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2048
QY 244 TGAACCACTGCTGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 303
DB TGAACCACTGCTGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1995
QY 304 TGTGATCGGCTGAGCGCGGAGGCGCGGAGAGATGAGAGATGAGAGATGAGAGATGAG 363
DB TGTGATCGGCTGAGCGCGGAGGCGCGGAGAGATGAGAGATGAGAGATGAGAGATGAG 2055
QY 364 TCAGCATGATGTTGGTGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 423
DB TCAGCATGATGTTGGTGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT

Db 2056 TCACATGATGTTGGGTGTCACCTGCTAGCCGATGTTTCATTGGCCAGCCCACTGCTCTCA 2115
 Oy 424 TCACATGCTGTAATCTCTGCGGGCCGAGTACAGAGAGATCAAGAGATGAGCACT 483
 Db 2116 TCACATGCTGTAATCTCTGCGGGCCGAGTACAGAGAGATCAAGAGATGAGCACT 2175
 Oy 484 ACATGTCCTTCCACAAAGTGCAGCTGACTTCCGCGAAGATCCACGACTACTATGAGC 543
 Db 2176 ACATGTCCTTCCACAAAGTGCAGCTGACTTCCGCGAAGATCCACGACTACTATGAGC 2235
 Oy 544 ACCGTTACAGAGGAGAGATGTTTGAAGAGACAGCATCTGCGCGAGCTCAACGCGGCC 603
 Db 2236 ACCGTTACAGAGGAGAGATGTTTGAAGAGACAGCATCTGCGCGAGCTCAACGCGGCC 2295
 Oy 604 TCGCGAGAGAGATGCTCAACTTCACTGCGGAGAGCTGCTGCTCACTGCGCTGTTTCG 663
 Db 2296 TCGCGAGAGAGATGCTCAACTTCACTGCGGAGAGCTGCTGCTCACTGCGCTGTTTCG 2355
 Oy 664 CCAACGCCAGCCCAACTTCTGTCAGGCGCATGCTGACCAAGCTCAAGTTTCAGAGCTTCC 723
 Db 2356 CCAATGCGGAGCCCAACTTCTGTCAGGCGCATGCTGACCAAGCTGCGTTTCAGAGCTTCC 2415
 Oy 724 AGCGGGGTGATCAATCAATCCGCGAAGGACCATCGGAGAGATGTAATTCATCCAGC 783
 Db 2416 AGCGGGGTGATCAATCAATCCGCGAAGGACCATCGGAGAGATGTAATTCATCCAGC 2475
 Oy 784 AGCGGGGTGATCAATCAATCCGCGAAGGACCATCGGAGAGATGTAATTCATCCAGC 843
 Db 2476 AGCGGGGTGATCAATCAATCCGCGAAGGACCATCGGAGAGATGTAATTCATCCAGC 2535
 Oy 844 ACTTCGGGGAGATGCTGCTGCTCAACCGGGGCGCGGAGCGAGCGGTGGGGCTGACA 903
 Db 2536 ACTTCGGGGAGATGCTGCTGCTCAACCGGGGCGCGGAGCGAGCGGTGGGGCTGACA 2595
 Oy 904 CCTACTGCGGCTCATTCGCTGAGAGCGTGAACAATTGAAGAGTGTGAGAGATGAC 963
 Db 2596 CCTACTGCGGCTCATTCGCTGAGAGCGTGAACAATTGAAGAGTGTGAGAGATGAC 2655
 Oy 964 CCAATGAGCGGCGGCTTCCAGAGAGTGGGCTATGACCGGCTGAGACCGCATCCGGAAGA 1023
 Db 2656 CCAATGAGCGGCGGCTTCCAGAGAGTGGGCTATGACCGGCTGAGACCGCATCCGGAAGA 2715
 Oy 1024 AGAATTCATCTCTGTCAGAGTGCAGATGACTCACTCGGGCGTATTCAACAAC 1083
 Db 2716 AGAATTCATCTCTGTCAGAGTGCAGATGACTCACTCGGGCGTATTCAACAAC 2775
 Oy 1084 AGAGAGCGCATTCATCCAGAGATGTCAGATGACAGCGCGAGATGATGTCAGAGGCG 1143
 Db 2776 AGAGAGCGCATTCATCCAGAGATGTCAGATGACAGCGCGAGATGATGTCAGAGGCG 2835
 Oy 1144 AGCTGGGTCAGAGCGGCTTCTTCCCGCGCGCGCGCGCGCGCACTGCTGG 1203
 Db 2836 AGCTGGGTCAGAGCGGCTTCTTCCCGCGCGCGCGCGCGCGCACTGCTGG 2895
 Oy 1204 CCATGCGCAGCTGTCAGAGCGGCGGCG 1231
 Db 2896 TGATCCAGGACCACTGAGAGGCTGCGCG 2923

RESULT 7
 US-09-086-436-32
 ; Sequence 32, Application US/09086436
 ; Patent No. 6703485
 ; GENERAL INFORMATION:
 ; APPLICANT: Kandel, Eric R.
 ; APPLICANT: Santoro, Bina
 ; APPLICANT: Bartsch, Dusan
 ; APPLICANT: Siegelbaum, Steven
 ; APPLICANT: Tibbs, Gareth
 ; APPLICANT: Grant, Seth
 ; TITLE OF INVENTION: Brain or Heart Cyclic Nucleotide Gated Ion Channel and
 ; TITLE OF INVENTION: Uses Thereof
 ; FILE REFERENCE: 0575/54806-A

; CURRENT APPLICATION NUMBER: US/09/086,436
 ; CURRENT FILING DATE: 1998-05-28
 ; NUMBER OF SEQ ID NOS: 67
 ; SOFTWARE: Patent Ver. 2.1
 ; SEQ ID NO 32
 ; LENGTH: 1512
 ; TYPE: DNA
 ; ORGANISM: Murine
 US-09-086-436-32
 Query Match 65.1%; Score 874.2; DB 4; Length 1512;
 Best Local Similarity 88.9%; Pred. No. 2.2e-170;
 Matches 945; Conservative 0; Mismatches 118; Indels 0; Gaps 0;
 Oy 4 TCGGCTTCAACCAAGATCTCTAGGCTCTGCGGCTGCTGCGCTCTCAAGCTGATCGCT 63
 Db 449 TCGGCTTCAACCAAGATCTCTAGGCTCTGCGGCTGCTGCGCTCTCAAGCTGATCGAT 508
 Oy 64 ACATCCATCAGTGGAGAGATCTTCCACATGACTATGACTGAGCGAGCGGATGTA 123
 Db 509 ATATCCACAGTGGAGAGATTTTCCACATGACTATGACTGAGCGAGCGGATGTA 568
 Oy 124 GATCTGATCTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 183
 Db 569 GATCTGATCTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 628
 Oy 184 TCGTGGGCCCATGCTGCAAGACTTCCGCGCAACTGCTGGGTGTCATCAATGAGCATGG 243
 Db 629 TCGTGGGCCCATGCTGCAAGACTTCCGCGCAACTGCTGGGTGTCATCAATGAGCATGG 688
 Oy 244 TGAACCACTGCTGAGAGTGAATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 303
 Db 689 TGAACCACTGCTGAGAGTGAATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 748
 Oy 304 TGGGCACTGGGTGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 363
 Db 749 TGGGCACTGGGTGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 808
 Oy 364 TCAGATGATGTTGGTGGCGCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 423
 Db 809 TCAGATGATGTTGGTGGCGCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 868
 Oy 424 TCCAGTGGCTGAGTCTCTCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 483
 Db 869 TCCAGTGGCTGAGTCTCTCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 928
 Oy 484 ACATGTCCTTCCACAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 543
 Db 929 ACATGTCCTTCCACAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 988
 Oy 544 ACCGTTACAGAGGAGATGTTTGAAGAGACAGCATCTGCGCGAGCTCAACGCGGCC 603
 Db 989 ACCGTTACAGAGGAGATGTTTGAAGAGACAGCATCTGCGCGAGCTCAACGCGGCC 1048
 Oy 604 TCGCGAGAGAGATGTCAGATTCCTCAACTGCGGAGAGTGTGAGGCTTCATGCTGTTTCG 663
 Db 1049 TCGCGAGAGAGATGTCAGATTCCTCAACTGCGGAGAGTGTGAGGCTTCATGCTGTTTCG 1108
 Oy 664 CCAACGCCAGCCCAACTTCTGTCAGGCGCATGCTGACCAAGCTCAAGTTTGAAGTCTTCC 723
 Db 1109 CCAATGCGGAGCCCAACTTCTGTCAGGCGCATGCTGACCAAGCTCAAGTTTGAAGTCTTCC 1168
 Oy 724 AGCGGGGTGATCAATCAATCCGCGAAGGACCATCGGAGAGATGTAATTCATCCAGC 783
 Db 1169 AGCGGGGTGATCAATCAATCCGCGAAGGACCATCGGAGAGATGTAATTCATCCAGC 1228
 Oy 784 AGCGGGGTGATCAATCAATCCGCGAAGGACCATCGGAGAGATGTAATTCATCCAGC 843
 Db 1229 AGCGGGGTGATCAATCAATCCGCGAAGGACCATCGGAGAGATGTAATTCATCCAGC 1288
 Oy 844 ACTTCGGGGAGATGCTGCTGCTCAACCGGGGCGCGGAGCGGCGGAGGCTGCGGCTGACA 903
 Db 1289 ACTTCGGGGAGATGCTGCTGCTCAACCGGGGCGCGGAGCGGCGGAGGCTGCGGCTGACA 1348

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Qy 904 CCTACTGCGGCTCTATTCGTGAGCGTGAACAATTCAACGAGGTGCTGAGAGATACC 963
Db 1349 CCTACTGCGGCTCTACTCACTGAGTGTGACAAATTTCAACGAGGTGCTGAGAGATACC 1408
Qy 964 CCATGATGCGGCGGCGCTTCAAGACGCTGACCATGACCGCTTGAACGCAATCGGCAAGA 1023
Db 1409 CCATGATGCGGCGGCGCTTGAAGCTGTGATGACCGGCTAGATGCAATAGGCAAGA 1468
Qy 1024 AGAATTCATCTCTCTGACAAAGGTGACGATGACCTCAACTC 1066
Db 1469 AGAATTCATCTCTCTGACAAAGGTGACGATGATCTCACTC 1511

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RESULT 8
US-08-997-685A-3

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; Sequence 3, Application US/08997685A
; Patent No. 651821
; GENERAL INFORMATION:
; APPLICANT: The Trustees of Columbia University
; APPLICANT: Kandel, Eric
; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof
; FILE REFERENCE: 0575/54806
; CURRENT APPLICATION NUMBER: US/08/997, 685A
; NUMBER OF SEQ ID NOS: 60
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 1584
; TYPE: DNA
; ORGANISM: mouse;
US-08-997-685A-3

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Query Match 64.9%; Score 871; DB 4; Length 1584;
Best Local Similarity 88.7%; Pred. No. 1e-169;
Matches 943; Conservative 0; Mismatches 120; Indels 0; Gaps 0;

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Qy 4 TGCGCTTACCAAAATCTCTAGCTCCGCGGCTGCTGCGCTCTCAACGCTGATCCGCT 63
Db 449 TGCGCTTACCAAAATCTCTAGCTCCGCGGCTGCTGCGCTCTCAACGCTGATCCGAT 508
Qy 64 ACATTCATCACTGAGAGAGATCTTCCATGATGACCTTGAACGCGGCTGATGA 123
Db 509 ATATTCACCAAGTGGAGAGATTTTCCATGATGACCTTGAACGCGGCTGATGATGC 568
Qy 124 GGAATTCATCTCATGACGATGATGCTGCTGCTGCTGCACTGGAGCGGCTGCTGCACT 183
Db 569 GCATCTGTAACCTGATGACGATGATGCTGCTGCTGCTGCACTGGAGCGGCTGCTGCACT 628
Qy 184 TCCGTGCGCCCATGCTGAGAGACTTCCGCGGCACTGCTGGGTTGTCATCAATGAGCATGG 243
Db 629 TCCGTGCGCCCATGCTGAGAGACTTCCGCGGCACTGCTGGGTTGTCATCAATGAGCATGG 688
Qy 244 TGAACCACTGCTGAGAGATGTAATCTCTTCCGACTCTTCAAGGCGCATGAGCCCATATGC 303
Db 689 TGAACCACTGCTGAGAGATGTAATCTCTTCCGACTCTTCAAGGCGCATGAGCCCATATGC 748
Qy 304 TGTGCAATCGGATACGCGCGGAGCGCGCCGAGAGCATGACGATCTGCTGACATGC 363
Db 749 TGTGCAATCGGATACGCGCGGAGCGCGCCGAGAGCATGACGATCTGCTGACATGC 808
Qy 364 TCAGCATGATTTGAGGAGCGACCTGCTACGCGCATGTTCAATGCGGCAAGCCCATGCGCTCA 423
Db 809 TCAGCATGATTTGAGGAGCGACCTGCTACGCGCATGTTCAATGCGGCAAGCCCATGCGCTCA 868
Qy 424 TCCAGTGCCTGAGACTCTCGCGGCGCGAGTACAGAGAAATGACAGAGGTGAGAGAT 483
Db 869 TCCAGTGCCTGAGACTCTCGCGGCGCGAGTACAGAGAAATGACAGAGGTGAGAGAT 928
Qy 484 ACATGCTCTTCAACAAGTGTGCACTGATCTTCCGCGCAAGATTCAGACTATATAGAC 543
Db 929 ACATGCTCTTCAACAAGTGTGCACTGATCTTCCGCGCAAGATTCAGACTATATAGAC 988

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Qy 544 ACCGTTACCAAGGCAAGATTTTGAAGAGACAGCATCTTGGGAGACTCAACGGGCCCC 603
Db 989 ACCGTTACCAAGGCAAGATTTTGAAGAGACAGCATCTTGGGAGACTCAACGGGCCCC 1048
Qy 604 TGGGAGAGAGATGCTGATCACTTCACTGCGGAGAGCTGTGGCTCCATGCGCTGTTTCG 663
Db 1049 TGGGAGAGAGATGCTGATCACTTCACTGCGGAGAGCTGTGGCTCCATGCGCTGTTTCG 1108
Qy 664 CCAAGCGGACCCCACTTGTGACAGGCGCATGCTGACCAAGTCAAGTGTGAGGCTTTCG 723
Db 1109 CCAAGTGCAGACCCCACTTGTGACAGGCGCATGCTGACCAAGTCAAGTGTGAGGCTTTCG 1168
Qy 724 AGCGGAGTACATCATCATCCGAGAGGACCATCGGAGAAAGATGATCTTCAATCCAGC 783
Db 1169 AGCGTGAATTTACATCATCCGAGAGGAGCATCGGAGAAAGATGATCTTCAATCCAGC 1228
Qy 784 AGCGGCTGTACAGGCTCTCACTAAGGCAACAAGAGATGAAGCTTCCGATGCTTCT 843
Db 1229 ATGGGAGTGTGAGGCTCTCACTAAGGCAACAAGAGATGAAGCTTCCGATGCTTCT 1288
Qy 844 ACTTGGGAGAGATCTGCTGCTCAACCGGAGGCGCGCACGAGGCTGCGGCTGACA 903
Db 1289 ACTTGGGAGAGATCTGCTGCTCAACGAGGCGCGCGCTTACGCGAGCTGCGAGCTGACA 1348
Qy 904 CCTACTGCGGCTCTATTCGTGAGCGTGAACAATTCAACGAGGTGCTGAGAGATACC 963
Db 1349 CCTACTGCGGCTCTACTCACTGAGTGTGACAAATTTCAACGAGGTGCTGAGAGATACC 1408
Qy 964 CCATGATGCGGCGGCGCTTCAAGACGCTGACCATGACCGCTTGAACGCAATCGGCAAGA 1023
Db 1409 CCATGATGCGGCGGCGCTTGAAGCTGTGATGACCGGCTAGATGCAATAGGCAAGA 1468
Qy 1024 AGAATTCATCTCTCTGACAAAGGTGACGATGATCTCACTC 1066
Db 1469 AGAATTCATCTCTCTGACAAAGGTGACGATGATCTCACTC 1511

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RESULT 9
US-09-774-528-317

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; Sequence 317, Application US/09774528
; Patent No. 6743619
; GENERAL INFORMATION:
; APPLICANT: Tang, Y. Tom
; APPLICANT: Zhou, Ping
; APPLICANT: Goodrich, Ryle
; APPLICANT: Liu, Chenghua
; APPLICANT: Asundi, Vinod
; APPLICANT: Ren, Feiyan
; APPLICANT: Zhang, Jie
; APPLICANT: Zhao, Qing A.
; APPLICANT: Yang, Yonghong
; APPLICANT: Xue, Aifeng J.
; APPLICANT: Wehrman, Tom
; APPLICANT: Wang, Jian-Rui
; APPLICANT: Wang, Dunrul
; APPLICANT: Dmanac, Radoje T.
; TITLE OF INVENTION: No. 6743619el Nucleic Acids and
; FILE REFERENCE: Polypeptides
; CURRENT APPLICATION NUMBER: US/09/774,528
; NUMBER OF SEQ ID NOS: 441
; SOFTWARE: PL_Fl_genes Version 2.0
; SEQ ID NO 317
; LENGTH: 2976
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (18)..(2174)
US-09-774-528-317

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Query Match 56.0%; Score 751.8; DB 4; Length 2976;

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Best Local Similarity 82.6%; Pred. No. 3,5e-145; Matches 861; Conservative 0; Mismatches 182; Indels 0; Gaps 0;

4 TGGCGTTACCAAGATCTCTAGGCTCTGCGGCTGCTGCGGCTCTGACGCTGATCCGCT 63
 Db 478 TTCCGTTACCAAGATCTCTAGGCTCTGCGGCTGCTGCGGCTCTGACGCTGATCCGCT 537
 Qy 64 ACATCCATCACTGGAGAGATCTTCAATGACCTATGACCTGAGCCGCGGTGATGA 123
 Db 538 ACATACACAGTGGAGAGATCTTCAATGACCTATGACCTGAGCCGCTGATGATC 597
 Qy 124 GGATCTGCAATCTCATCAATGATGATGCTGCTCTGCACTGAGGACGGCTGCTGAGT 183
 Db 598 GCATCTTCACTCATGATGATGATGCTGCTCTGCACTGAGGACGGCTGCTGAGT 657
 Qy 184 TCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 243
 Db 658 TCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 717
 Qy 244 TGAACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 303
 Db 718 TGAACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 777
 Qy 304 TGTGATCGGGTACGGCGGCGCGCGCGCGCGAGAGATGACGAGATGACGAGATGACGAG 363
 Db 778 TGTGATCGGGTACGGCGGCGCGCGCGCGAGAGATGACGAGATGACGAGATGACGAG 837
 Qy 364 TCAAGATATGTTGGGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 423
 Db 838 TCAAGATATGTTGGGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 897
 Qy 424 TCCAGTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 483
 Db 898 TCCAGTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 957
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 Qy 544 ACCGTTACCGAGGCAAGATGTTGACGAGACGATCTGAGGACGCTGCAACGCGGCC 603
 Db 1018 ACCGTTACCGAGGCAAGATGTTGACGAGACGATCTGAGGACGCTGCAACGCGGCC 1077
 Qy 604 TCGCGAGAGATGCTCAACTTCACTGCGCGGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 663
 Db 1078 TCGCGAGAGATGCTCAACTTCACTGCGCGGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1137
 Qy 664 CCAACGCGGACCCCACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 723
 Db 1138 CCAACGCGGACCCCACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1197
 Qy 724 AGCGCGGAGATGCTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 783
 Db 1188 AGCGCGGAGATGCTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1257
 Qy 784 AGCGCGGAGATGCTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 843
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 Db 1378 CCTATGCGCGCTTACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1437
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 Qy 1024 AGAATTCATCTCTGCAAG 1046

Db 1498 AGAATTCATCTGCAAGGAG 1520

RESULT 10
 US-08-997-685A-1
 ; Sequence 1, Application US/0897685A
 ; Patent No. 6551821
 ; GENERAL INFORMATION:
 ; APPLICANT: The Trustees of Columbia University
 ; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof
 ; FILE REFERENCE: 0575/54806
 ; CURRENT FILING DATE: US/08/997,685A
 ; NUMBER OF SEQ ID NOS: 60
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 1
 ; LENGTH: 2733
 ; TYPE: DNA
 ; ORGANISM: mouse
 US-08-997-685A-1

Query Match 54.8%; Score 735.2; DB 4; Length 2733;
 Best Local Similarity 78.1%; Pred. No. 8,7e-142;
 Matches 884; Conservative 0; Mismatches 248; Indels 0; Gaps 0;

4 TGGCGTTACCAAGATCTCTAGGCTCTGCGGCTGCTGCGGCTCTGACGCTGATCCGCT 63
 Db 737 TGAAGTTTACCAAAATCTCTAGGCTCTGCGGCTTATACCCCTTCAAGGTTATACGAT 796
 Qy 64 ACATCCATCACTGGAGAGATCTTCAATGACCTATGACCTGAGCCGCGGTGATGA 123
 Db 797 ACATACACAGTGGAGAGATCTTCAATGACCTATGACCTGAGCCGCTGATGATC 856
 Qy 124 GGATCTGCAATCTCATCAATGATGATGCTGCTCTGCACTGAGGACGGCTGCTGAGT 183
 Db 857 GCATCTTCACTCATGATGATGATGCTGCTCTGCACTGAGGACGGCTGCTGAGT 916
 Qy 184 TCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 243
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 Qy 244 TGAACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 303
 Db 977 TGAACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1036
 Qy 304 TGTGATCGGGTACGGCGGCGCGCGCGCGAGAGATGACGAGATGACGAGATGACGAG 363
 Db 1037 TGTGATCGGGTACGGCGGCGCGCGCGAGAGATGACGAGATGACGAGATGACGAG 1096
 Qy 364 TCAAGATATGTTGGGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 423
 Db 1097 TCAAGATATGTTGGGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1156
 Qy 424 TCCAGTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 483
 Db 1157 TCCAGTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1216
 Qy 484 ACATGTCATTCACAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 543
 Db 1217 ACATGTCATTCACAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1276
 Qy 544 ACCGTTACCGAGGCAAGATGTTGACGAGACGATCTGAGGACGCTGCAACGCGGCC 603
 Db 1277 ACCGTTACCGAGGCAAGATGTTGACGAGACGATCTGAGGACGCTGCAACGCGGCC 1336
 Qy 604 TCGCGAGAGATGCTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 663
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 Qy 664 CCAACGCGGACCCCACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 723
 Db 1397 CCAACGCGGACCCCACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1456

QY 724 AGCCGGGTGACTATCATCCGCGAAGGACCATCGGAGAGATGACTTATCCAGC 783
DB 1457 AGCCGGGAGACTATATTCATTCGAGAGAGAGCTGTGGAGAGAAATGATTTTATCCAGC 1516
QY 784 ACAGCGGTGTGACGCTGTCTACTAAGGCAACAGAGATGAGTGTCCGATGCTCTCT 843
DB 1517 ACAGGTGTGTGCGCTTATTCACCAAGTCCAGTAAAGAAATGAAAGCTGACAGATGCTCTT 1576
QY 844 ACTTCGGGAGATCTGCTGTCTACCCGGGGCCCGCAAGCGGAGCTGTGGGCTGACA 903
DB 1577 ACTTCGGAGAGATATGCTGTCTGACCAAGGCGCGGCACTGCGAGTGTCCGAGCTGATA 1636
QY 904 CCTACTGCGGCTCTATTCGCTGAGCGAATTCGCAAGGAGTGTGAGAGATGAC 963
DB 1637 CTTACTGTCTCTTACTCTCTTCTGAGCAATTTCAATGAGGTCTTGGAGAGATATTC 1696
QY 964 CCAATGATGAGAGAGCTTTGAGACAGTGTGCGCATGACCGCTGTGACCGCATCGGCAAGA 1023
DB 1697 CCAATGATGAGAGAGCTTTGAGACAGTGTGCGCATGACCGCATGAGATGAGCAAGA 1756
QY 1024 AGAATTCATCTCTCTGACCAAGGTGACGATGACTCACTCGGCGCTATTCACCAACC 1083
DB 1757 AAAACTTATCTCTCTGACCAAGGTGACGAGATCTAAACACTGCTGTCTTTCACCAACC 1816
QY 1084 AGAGAAAGCCATCATCCAGAGATGTCAGTACGACCGGAGATGATGCA 1135
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RESULT 11

US-09-086-436-34
; Sequence 34, Application US/09086436
; Patent No. 6703485
; GENERAL INFORMATION:
; APPLICANT: Kandel, Eric R.
; APPLICANT: Santoro, Bina
; APPLICANT: Bartsch, Dusan
; APPLICANT: Siegelbaum, Steven
; APPLICANT: Tibbs, Gareth
; APPLICANT: Grant, Seth
; TITLE OF INVENTION: Brain or Heart Cyclic Nucleotide Gated Ion Channel and
; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: 0575/54806-A
; CURRENT APPLICATION NUMBER: US/09/086,436
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 34
; LENGTH: 1518
; TYPE: DNA
; ORGANISM: Murine
US-09-086-436-34

Query Match 52.6%; Score 706; DB 4; Length 1518;
Best Local Similarity 85.3%; Pred. No. 7,6e-136;
Matches 787; Conservative 0; Mismatches 136; Indels 0; Gaps 0;

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QY 124 GGAATTCGATCTCATCAGATGATGCTGCTCTGCGCATGAGGAGCGGCTGCGTCACT 183
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QY 244 TGAACCACTGCTGAGTGAATCTGACTCTTCCGACTCTTCAAGGCCATGAGCCACATGC 303
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QY 304 TGTGATCTGAGTGAAGCGCGGAGAGCGCCCGGAGAGCATGACGAGATCTGCTGACATGC 363
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QY 784 ACAGCGGTGTGACGCTGTCTACTAAGGCAACAGAGATGAGTGTCCGATGCTGCTGCT 843
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QY 844 ACTTCGGGAGATGCTGCTGTCTACCCGGGCGCGGCGGAGAGAGAGAGAGAGAGAGAGAG 903
DB 1436 ACTTCGGGAGATGCTGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1495
QY 904 CTTACTGCGGCTCTTATTCGCTG 926
DB 1496 CTTACTGCGGCTCTTACTACTG 1518

RESULT 12

US-08-997-685A-5
; Sequence 5, Application US/08997685A
; Patent No. 6551821
; GENERAL INFORMATION:
; APPLICANT: The Trustees of Columbia University
; APPLICANT: Kandel, Eric
; TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof
; FILE REFERENCE: 0575/54806
; CURRENT APPLICATION NUMBER: US/08/997,685A
; NUMBER OF SEQ ID NOS: 60
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 5
; LENGTH: 1507
; TYPE: DNA
; ORGANISM: mouse;
US-08-997-685A-5

Query Match 51.3%; Score 688.8; DB 4; Length 1507;
Best Local Similarity 85.4%; Pred. No. 2,6e-132;
Matches 779; Conservative 0; Mismatches 132; Indels 1; Gaps 1;

Thu Sep 1 12:59:36 2005

us-09-640-582a-1.rni

Page 10

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Db	717	CTCATATGCAATGATCTTCTGCTGCTGCTCACTGGAGATGGCTGCTCAATTCTAGTGGCC	776
QY	195	ATGCTGCAGAGACTTCCCGGCAACTGCTGGGGTGCATCATATGGCATGGTGAACACTCG	254
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Db	897	TATGAGACGGCAGGCAACCGTAGGATATGTCTGACGTCTGGCTCACATGCTGACATGATC	956
QY	375	GTCGGGTGCACTGTATAGCCATGTTTATCGGCGCACGGCACTGGCTCATCCAGTCGCTG	434
Db	957	GTCGGGGGCACTGTATAGCCATGTTTATCGGCGCACGGCACTGGCTCATCCAGTCGCTA	1016
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Db	1257	CCCAACTTGTACATCTCATGCTGACCAAGTTGCGTTTGAGAGTCTTCAAGCCGGAGAT	1316
QY	735	TACATCATCTCGGAGAGGCACTCGGAGAGAAATGATCTTATATCAGACCGGCTGGTC	794
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Db	1377	AGCGTGTACTTAAGGGCAACAAGAGATGAAAGTGTCCGATGCTCTTATTTTGAAGAG	1436
QY	855	ATCTGCTGTCACTCCGGGGCCGCGCACGCGAGCGTGGGGCTGACACTTACTGGCG	914
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QY	915	CTCTATTGCGTG 926	
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RESULT 13
US-09-086-436-38
; Sequence 38, Application US/09086436
; Patent No. 6703485
; GENERAL INFORMATION
; APPLICANT: Kandel, Eric R.
; APPLICANT: Santoro, Bina
; APPLICANT: Bartsch, Dusan

Query Match	50.7%	Score 680.2	DB 4	Length 2246
Beat Local Similarity	75.0%	Fred. No. 1.6e130		
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64	ACATCCATCAGTGGAGAGAGATCTTTCACATGACCTATGACCTGCGCAGCGGATGATGA	123		
467	ACATACATCAATGAGGAGAGATTTCCACATGACATTAATGATCTCCGACGTGACGGTGA	526		
124	GAATGTGCAATCTCATCAGCATGATGCTGCTGCTCTGCGACCTGGACGGCTGCTCAGT	183		
527	GAATTTTAACTCTCATCGGCATGATGCTGCTCTCTGCGACCTGGAGATGTTGTCTTCAGT	586		
184	TCTGTGTCCCATGTGTGAGGACTTCCGCGCAGATGTGCGGGTGTCCATCATGTCATG	243		
587	TCTTAGTACCACTACTGCAAGGACTTCCACACAGATTTGCTGGGTGTCTTTAATTAATG	646		
244	TGAACACCTCGTGGAGATGATCTGATCTCTTGCGACTCTTCAAGGCGCATGAGCCATG	303		
647	TTAATGATTTCTTGGGAAAGAGATTTATAGCACTTTCAAACTATGATGATCATG	706		
304	TGTGATGTGGGATGCGCGCGGAGCGCCGAGAGATGACGATCATGCTGTGATGATG	363		
707	TGTGATTTGGGATGAGACCCAGCCAGTCAATGATCTGATCTCTGATTTACATG	766		
364	TCAGATGATTTGTGGGTGCGACCTGTCTACGCTATTTCAATGCGCACTGCGCTCA	423		
767	TGAGCATATGCTCGGGCGCACCTGTCTATGCAATTTGTGCGGACATGCGACCGCTTGA	826		
424	TTCAGTCTGTGACTCTCTCGCGCGCGCATGACAGAGAAAGTACAAGCATGATGAGCA	483		
827	TTCATCTCTGTGATTTCTTGAGGCGCGAGTATCAAGAAAGATTAAGCAAGTGAACAT	886		
484	ACATGTCTTTCACAAAGCTGCGAGCTGACTTCCGCGAGAAATTCACAGATCTATAGAC	543		
887	ACATGTCTTTCATTAAGTTACAGCTGATATGCGTCAAGAAATATGATTTATGAAAC	946		
544	ACCGTTACAGGCGCAAGATGTTTTCAGAGACAGATCTCTGCGCGAGTCAACGCGGCC	603		
947	ACAGATTCACAAAGCAAAATCTTGTATGAGGAAATATTTCTCAATGAACATGATATC	1001		
604	TGCGGAGAGATGCTCAACTTCACTGCGCGGAGCTGAGTCTTCAATGCGCGCTTTC	663		
1007	TGAGAGAGAGATATCATCACTTCACTGTGCGAAACGTGGCTCAATATGCTTTATTTG	1061		
664	CGAAGCGGAGCGCAATCTTCTGCAAGGCGCATGCTGACCAAGTCAAGTTGAGGCTTTC	723		
1067	CTAATGCGGATCTAATTTTGTGATGCTGCATGCTGACAGATGATTTGAGGCTTTC	1122		
724	AGCGGCGGATCATCATCTGCGCAAGGACCATGCGGAGAAAGATATATCTTATCTAC	783		
1127	AACCTGAGATTAATATCATGAGAGAGGCGGTGGATTAATAAATATTTATTTCAAC	1188		
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RESULT 14

US-08-997-685A-9
Sequence 9, Application US/08997685A
Patent No. 6551821

GENERAL INFORMATION:
APPLICANT: The Trustees of Columbia University

APPLICANT: Kandel, Eric

TITLE OF INVENTION: Brain Cyclic Nucleotide Gated Ion Channel and Uses Thereof

CURRENT APPLICATION NUMBER: US/08/997,685A

CURRENT FILING DATE: 1997-12-12

SOFTWARE: PatentIn version 3.1

SEQ ID NO 9

LENGTH: 2263

TYPE: DNA

ORGANISM: human

US-08-997-685A-9

Query Match 50.7%; Score 680.2; DB 4; Length 2263;
Best Local Similarity 75.0%; Pred. No. 1.6e-110;
Matches 850; Conservative 0; Mismatches 283; Indels 0; Gaps 0;

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Db 707 TGTGATGGGTAATGAGAGCCCAAGCCCAAGTCAAGATGTTGACCTCTGGAATTCATATGC 766
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RESULT 15

US-09-774-528-238
Sequence 238, Application US/09774528
Patent No. 6743619

GENERAL INFORMATION:

APPLICANT: Tang, Y. Tom

APPLICANT: Zhou, Ping

APPLICANT: Goodrich, Ryle

APPLICANT: Liu, Chenghua

APPLICANT: Asundi, Vinod

APPLICANT: Ren, Feiyan

APPLICANT: Zhang, Jie

APPLICANT: Zhao, Qing A.

APPLICANT: Yang, Yonghong

APPLICANT: Xue, Aidong J.

APPLICANT: Wehman, Tom

APPLICANT: Wang, Jian-Rui

APPLICANT: Wang, Dunru

APPLICANT: Drmanac, Radoje T.

TITLE OF INVENTION: No. 6743619el Nucleic Acids and

FILE REFERENCE: 802

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

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Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 327154945 residues

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Maximum Match 100%
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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3	1295.4	96.5	3459	22	US-10-756-149-1720
4	1207	89.9	1792	10	US-09-086-436-40
5	1207	89.9	1792	19	US-10-753-991-40
6	1194.4	89.0	1790	21	US-10-384-107-11
7	1191.6	88.8	2125	17	US-10-292-798-2011

8	1109.2	82.7	1966	15	US-10-017-161-2369	Sequence 2369, Ap
9	1048.6	78.1	3102	14	US-10-067-457-6	Sequence 6, Appl
10	927.2	69.1	4751	18	US-10-311-795-5	Sequence 5, Appl
11	927.2	69.1	5065	14	US-10-067-457-4	Sequence 4, Appl
12	927.2	69.1	5499	18	US-10-276-774-973	Sequence 973, Ap
13	874.2	65.1	1512	10	US-09-086-436-32	Sequence 32, Appl
14	874.2	65.1	1512	19	US-10-753-991-32	Sequence 32, Appl
15	871	64.9	1584	21	US-10-384-107-3	Sequence 3, Appl
16	753.4	56.1	3852	18	US-10-332-447-57	Sequence 57, Appl
17	751.8	56.0	2325	10	US-09-548-933-2	Sequence 2, Appl
18	751.8	56.0	2325	10	US-10-158-684-9	Sequence 9, Appl
19	751.8	56.0	2325	14	US-10-158-711-9	Sequence 9, Appl
20	751.8	56.0	2976	17	US-10-120-988-317	Sequence 317, App
21	751.8	56.0	3496	18	US-10-311-795-7	Sequence 7, Appl
22	735.2	54.8	2733	21	US-10-384-107-1	Sequence 1, Appl
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24	706	52.6	1518	19	US-10-753-991-34	Sequence 34, Appl
25	688.8	51.3	1507	21	US-10-384-107-5	Sequence 5, Appl
26	688.8	50.8	2990	18	US-10-287-226-351	Sequence 351, App
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28	680.2	50.7	1873	16	US-10-296-270-20	Sequence 20, Appl
29	680.2	50.7	2246	10	US-09-086-436-38	Sequence 38, Appl
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32	680.2	50.7	2484	16	US-10-296-270-22	Sequence 22, Appl
33	680.2	50.7	2484	16	US-10-296-270-24	Sequence 24, Appl
34	680.2	50.7	2670	18	US-10-311-795-1	Sequence 1, Appl
35	680.2	50.7	2673	14	US-10-158-684-3	Sequence 3, Appl
36	680.2	50.7	2673	14	US-10-158-711-3	Sequence 3, Appl
37	680.2	50.7	2673	16	US-10-296-270-23	Sequence 23, Appl
38	680.2	50.7	2673	16	US-10-296-270-25	Sequence 25, Appl
39	680.2	50.7	2748	21	US-10-466-992-1	Sequence 1, Appl
40	680.2	50.7	2748	21	US-10-466-992-3	Sequence 3, Appl
41	680.2	50.7	2748	21	US-10-466-992-13	Sequence 13, Appl
42	680.2	50.7	2748	21	US-10-466-992-15	Sequence 15, Appl
43	680.2	50.7	2748	21	US-10-466-992-17	Sequence 17, Appl
44	680.2	50.7	2791	16	US-10-296-270-1	Sequence 1, Appl
45	680.2	50.7	2791	16	US-10-296-270-5	Sequence 5, Appl

ALIGNMENTS

RESULT 1
US-10-067-457-2
; Sequence 2, Application US/10067457
; Publication No. US20030082513A1
; GENERAL INFORMATION:
; APPLICANT: Aventis Pharma Deutschland GmbH
; TITLE OF INVENTION: Process for identifying subences which modulate the
; FILE REFERENCE: AVE D-2000/A006
; CURRENT FILING DATE: 2002-04-09
; PRIOR APPLICATION NUMBER: US/09/779,587
; PRIOR FILING DATE: 2001-02-09
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 2
; LENGTH: 3372
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-067-457-2

Query Match 96.6%; Score 1297; DB 14; Length 3372;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 1328; Conservative 7; Mismatches 3; Indels 3; Gaps 3;
QY 4 TGGCGTTCACCAAGATCTCAGCCTCTGCGGCTGCGGCTTCACGCTATTCGGCT 63
Db 1012 TGGCGTTCACCAAGATCTCAGCCTCTGCGGCTGCGGCTTCACGCTATTCGGCT 1071
QY 64 ACATCATCATGATGAGAGATCTTCACATGACCTATGACCTGCGGCGGCTGATGA 123

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Db 1072 ACATCCATCAGTGGGAGAGATCTTCCACATGACCTTAAGACCTGGCCAGCGCGGATGAGA 1131
Qy 124 GGATTCGAATCTCTACATGAGATGATGCTGCTTGCACATGGAGCGGCTGCGAGT 183
Db 1132 GGATTCGAATCTCTACATGAGATGATGCTGCTTGCACATGGAGCGGCTGCGAGT 1191
Qy 184 TCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 243
Db 1192 TCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1251
Qy 244 TGAACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 303
Db 1252 TGAACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1311
Qy 304 TGTGATCGGGTACCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 363
Db 1312 TGTGATCGGGTACCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1371
Qy 364 TCAGCATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 423
Db 1372 TCAGCATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1431
Qy 424 TCCAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 483
Db 1432 TCCAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1491
Qy 484 ACATGCTCTTCCACAAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 543
Db 1492 ACATGCTCTTCCACAAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1551
Qy 544 ACCGTTACAGGCGCAAGATGTTTGAAGAGACAGATCTGGCGGACGCTCAACGGGCGCC 603
Db 1552 ACCGTTACAGGCGCAAGATGTTTGAAGAGACAGATCTGGCGGACGCTCAACGGGCGCC 1611
Qy 604 TCCGCGGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 663
Db 1612 TCCGCGGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1671
Qy 664 CCAAGCGCGGACCCCACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 723
Db 1672 CCAAGCGCGGACCCCACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1731
Qy 724 AGCGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 783
Db 1732 AGCGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1791
Qy 784 AGCGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 843
Db 1792 AGCGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1851
Qy 844 ACTTGGGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 903
Db 1852 ACTTGGGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1911
Qy 904 CCTACTGCGCGCTCTATTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 963
Db 1912 CCTACTGCGCGCTCTATTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1971
Qy 964 CCATGATGCGCGCGCTCTGAGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1023
Db 1972 CCATGATGCGCGCGCTCTGAGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2031
Qy 1024 AGAATTCATCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1083
Db 2032 AGAATTCATCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2091
Qy 1084 AGGAGAAAGCCATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1143
Db 2092 AGGAGAAAGCCATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2151
Qy 1144 AGCTGGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1202
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Db 2152 AGCTGGG-TCAGCGGCTGGGCTCTTCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 2210
Qy 1203 GCCATCGCCACGCTGTCAGAGAGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1261
Db 2211 GCCATCGCCACGCTGTCAGAGAGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 2270
Qy 1262 CTGCTGGGCGCGCTGCGCTGCGCTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1321
Db 2271 CTGCTGGGCGCGCTGCGCTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 2330
Qy 1322 GCACTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1342
Db 2331 GCACTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 2351
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RESULT 2
US-10-311-795-3
; Sequence 3, Application US/10311795
; Publication No. US2004003943A1
; GENERAL INFORMATION:
; APPLICANT: SmithKline Beecham plc
; TITLE OF INVENTION: New Use
; FILE REFERENCE: P32614
; CURRENT APPLICATION NUMBER: US/10/311,795
; CURRENT FILING DATE: 2002-12-19
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO: 3
; LENGTH: 3459
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-311-795-3
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Query Match 96.5%; Score 1295.4; DB 18; Length 3459;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 1327; Conservative 7; Mismatches 4; Indels 3; Gaps 3;
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Qy 4 TGGCGCTTACAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 63
Db 1030 TGGCGCTTACAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1089
Qy 64 ACATTCATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 123
Db 1090 ACATTCATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1149
Qy 124 GGATTCGAATCTCTATGAGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 183
Db 1150 GGATTCGAATCTCTATGAGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1209
Qy 184 TCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 243
Db 1210 TCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1269
Qy 244 TGAACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 303
Db 1270 TGAACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1329
Qy 304 TGTGATCGGGTACCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 363
Db 1330 TGTGATCGGGTACCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1389
Qy 364 TCAACATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 423
Db 1390 TCAACATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1449
Qy 424 TCCAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 483
Db 1450 TCCAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1509
Qy 484 ACATGCTCTTCCACAAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 543
Db 1510 ACATGCTCTTCCACAAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1569
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QY 544 ACCGTTACGAGGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 603
DB 1570 ACCGTTACGAGGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1629
QY 604 TGGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 663
DB 1630 TGGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1689
QY 664 CCAAGCGGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 723
DB 1690 CCAAGCGGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1749
QY 724 AGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 783
DB 1750 AGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1809
QY 784 AGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 843
DB 1810 AGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1869
QY 844 ACTTGGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 903
DB 1870 ACTTGGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1929
QY 904 CTTACTGCGGCTTATTCGCTGAGCGTGAACATTTCAACGAGGTGCTGAGAGATAC 963
DB 1930 CTTACTGCGGCTTATTCGCTGAGCGTGAACATTTCAACGAGGTGCTGAGAGATAC 1989
QY 964 CCATGATGCGGCGGCTTTCGAGCGGTGCGCATGACCGGCTGGAACGGCATCGCAAGA 1023
DB 1990 CCATGATGCGGCGGCTTTCGAGCGGTGCGCATGACCGGCTGGAACGGCATCGCAAGA 2049
QY 1024 AGAATTCATCTCTGAGCAAGGTGAGAGATGATGATGATGATGATGATGATGATGATGAT 1083
DB 2050 AGAATTCATCTCTGAGCAAGGTGAGAGATGATGATGATGATGATGATGATGATGATGAT 2109
QY 1084 AGGAGAACGCGATCATTCAGAGAGATGATGATGATGATGATGATGATGATGATGATGAT 1143
DB 2110 AGGAGAACGCGATCATTCAGAGAGATGATGATGATGATGATGATGATGATGATGATGAT 2169
QY 1144 AGCTGGGCTGAGCGGCTTTCGAGCGGTGCGCATGACCGGCTGGAACGGCATCGCAAGA 1202
DB 2170 AGCTGGGCTGAGCGGCTTTCGAGCGGTGCGCATGACCGGCTGGAACGGCATCGCAAGA 2228
QY 1203 GCGATGCGCAGCGTGCAGAGCGGCGGCGCATGATGATGATGATGATGATGATGATGATGAT 1261
DB 2229 GCGATGCGCAGCGTGCAGAGCGGCGGCGCATGATGATGATGATGATGATGATGATGATGAT 2288
QY 1262 CTCGTGGGCGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGAT 1321
DB 2289 CTCGTGGGCGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGAT 2348
QY 1322 GCACCTGCGGCGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGAT 1342
DB 2349 GCACCTGCGGCGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGAT 2369

RESULT 3
US-10-756-149-1720
; Sequence 1720, Application US/10756149
; Publication No. US20050181375A1
; GENERAL INFORMATION:
; APPLICANT: Zlotnik, Albert
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: NOVEL METHODS OF DIAGNOSIS FOR METASTATIC CANCER, COMPOSITIONS AND
; TITLE OF INVENTION: METHODS OF SCREENING FOR MODULATORS OF METASTATIC CANCER
; FILE REFERENCE: file
; CURRENT APPLICATION NUMBER: US/10/756,149
; NUMBER OF SEQ ID NOS: 5818
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1720
; LENGTH: 3459

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; TYPE: DNA
; ORGANISM: Homo Sapiens
US-10-756-149-1720

Query Match      96.5%; Score 1295.4; DB 22; Length 3459;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 1327; Conservative 7; Mismatches 4; Indels 3; Gaps 3;

QY 4 TGGCGTTACCAAGATCTCTGAGCGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGAT 63
DB 1030 TGGCGTTACCAAGATCTCTGAGCGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGAT 1089
QY 64 ACATCATCATGAGGAGAGATCTTCCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 123
DB 1090 ACATCATCATGAGGAGAGATCTTCCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1149
QY 124 GATATGCAATCTCATGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 183
DB 1150 GATATGCAATCTCATGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1209
QY 184 TCCGTGGGCGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 243
DB 1210 TCCGTGGGCGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1269
QY 244 TGAACCACTCGTGAAGTGAATCTGATCTCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGATGAT 303
DB 1270 TGAACCACTCGTGAAGTGAATCTGATCTCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1329
QY 304 TGTGATGCGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 363
DB 1330 TGTGATGCGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1389
QY 364 TCAACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 423
DB 1390 TCAACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1449
QY 424 TCCAGTGGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 483
DB 1450 TCCAGTGGGCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1509
QY 484 ACATGTCCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 543
DB 1510 ACATGTCCTTTCGAGCGGTGCGCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1569
QY 544 ACCGTTACGAGGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 603
DB 1570 ACCGTTACGAGGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1629
QY 604 TGGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 663
DB 1630 TGGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1689
QY 664 CCAAGCGGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 723
DB 1690 CCAAGCGGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1749
QY 724 AGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 783
DB 1750 AGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1809
QY 784 AGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 843
DB 1810 AGCGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1869
QY 844 ACTTGGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 903
DB 1870 ACTTGGGAGAGATGTTTGAAGAGACAGATCTCGGCGAGCTCAACGGGCCCC 1929
QY 904 CTTACTGCGGCTTATTCGCTGAGCGTGAACATTTCAACGAGGTGCTGAGAGATAC 963
DB 1930 CTTACTGCGGCTTATTCGCTGAGCGTGAACATTTCAACGAGGTGCTGAGAGATAC 1989
QY 964 CCATGATGCGGCGGCTTTCGAGCGGTGCGCATGACCGGCTGGAACGGCATCGCAAGA 1023

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Db 1990 CCAATGATGCGGCGGCGCTTTCAGAGCGATGGCCATGACCGGATCGGCAAGCA 2049
Qy 1024 AGAATTCATCTCTCTGCAACAAGTGGACGATGACCTCAACTCGGCGGTATTCAACAAC 1083
Db 2050 AGAATTCATCTCTCTGCAACAAGTGGACGATGACCTCAACTCGGCGGTATTCAACAAC 2109
Qy 1084 AGAAGACGCGCATCTCAAGAGATGTCGAAGTACGACCGGAGATGTCGACGAGCGG 1143
Db 2110 AGAAGACGCGCATCTCAAGAGATGTCGAAGTACGACCGGAGATGTCGACGAGCGG 2169
Qy 1144 AGCTGGGCTCAGCGCGTGGGCTCTTCCCGCGCGCGCGCGCGCGCA-GTCACTCG 1202
Db 2170 AGCTGGG-TCAAGCGGTGGGCTCTTCCCGCGCGCGCGCGCGCGCGCAAGTCACTCG 2228
Qy 1203 GCCATCGCCACGCTGACAGACGCGCGGCGCATGAGCTTCTGCGCGCA-GTGGCGGCGCG 1261
Db 2229 GCCATCGCCACGCTGACAGACGCGCGGCGCATGAGCTTCTGCGCGCAAGTGGCGGCGG 2288
Qy 1262 CTCGTGGGCGCGCTGGCGCTCGGCTCGCGCGCTCGTGGCGGCTGCGGCGGCGGCGG 1321
Db 2289 CTCGTGGGCGCGCTGGCGCTCGGCTCGCGCGCTCGTGGCGGCGGCGGCGGCGGCGG 2348
Qy 1332 GCACCTGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1342
Db 2349 GCACCTGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 2369
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RESULT 4

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US-09-086-436-40
; Sequence 40, Application US/09086436
; Publication No. US2003011898A1
; GENERAL INFORMATION:
; APPLICANT: Kandel, Eric R.
; APPLICANT: Santoro, Bina
; APPLICANT: Bartsch, Dusan
; APPLICANT: Siegelbaum, Steven
; APPLICANT: Tibbs, Gareth
; APPLICANT: Grant, Seth
; TITLE OF INVENTION: Brain or Heart Cyclic Nucleotide Gated Ion Channel and
; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: 0575/54806-A
; CURRENT APPLICATION NUMBER: US/09/086,436
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 40
; LENGTH: 1792
; TYPE: DNA
; ORGANISM: Human
US-09-086-436-40
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Query Match 89.9%; Score 1207; DB 10; Length 1792;
Best Local Similarity 99.0%; Pred. No. 8,7e-311;
Matches 1235; Conservative 0; Mismatches 11; Indels 2; Gaps 2;

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Qy 4 TCGCTTCAACCAAGATCTTCAAGCTCTGCGGCTGCTGCGGCTCTTCAAGCTTGAATCGGCT 63
Db 541 TCGCTTCAACCAAAATCTTCAAGCTCTGCGGCTGCTGCGGCTCTTCAAGCTTGAATCGGCT 600
Qy 64 ACATTCATAGTGGAGAGATCTTCAACATGACCTATGACCTGCGACGCGGATGATGA 123
Db 601 ACATTCATAGTGGAGAGATCTTCAACATGACCTATGACCTGCGACGCGGATGATGA 660
Qy 124 GGATTCGATCTCAATGACATGATGCTGCTGCTGCGACCTGAGACGCGCTGCTGCACT 183
Db 661 GGATTCGATCTCAATGACATGATGCTGCTGCTGCGACCTGAGACGCGCTGCTGCACT 720
Qy 184 TCTGTGTCCTGCTGCGAGACTTCCGCGCACTGCTGGGTGTCATCAATGAGCATG 243
Db 721 TCTGTGTCCTGCTGCGAGACTTCCGCGCACTGCTGGGTGTCATCAATGAGCATG 780
Qy 244 TGAACCACTCGTGAGTGAATGTACTGCTTGCACCTCTTCAAGGCGATGAGCCATGCG 303
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Db 781 TGAACCACTGAGTGAATGTACTGCTTGCACCTCTTCAAGGCGATGAGCCATGAGCCATGCG 840
Qy 304 TGTGATTCGGGTACGGCGCGGAGCGCGCGGAGAGCATGACGACATCTTGGCTTGAATGCG 363
Db 841 TGTGATTCGGGTACGGCGCGGAGCGCGCGGAGAGCATGACGACATCTTGGCTTGAATGCG 900
Qy 364 TCAAGATGATGTTGGGTGCCACTTGTACGCGCATGTTCAATGTCGCGCAAGCGCTGCTCA 423
Db 901 TCAAGATGATGTTGGGTGCCACTTGTACGCGCATGTTCAATGTCGCGCAAGCGCTGCTCA 960
Qy 424 TCAAGTGGTGAATCTCTGCGGCGCGGAGTACAGAGAGAGTACAGAGAGTGAAGTGAAGT 483
Db 961 TCAAGTGGTGAATCTCTGCGGCGCGGAGTACAGAGAGAGTGAAGTGAAGTGAAGTGAAGT 1020
Qy 484 ACATGTCCTTTCACAAAGCTGCGAGCTGACTTTCGCGAGAAATTCACAGACTATGAGC 543
Db 1021 ACATGTCCTTTCACAAAGCTGCGAGCTGACTTTCGCGAGAAATTCACAGACTATGAGC 1080
Qy 544 ACCGTTACAGAGGCAAGATGTTTGAAGAGAGACAGATCTTGGCGAGCTCAAGCGGCGCG 603
Db 1081 ACCGTTACAGAGGCAAGATGTTTGAAGAGAGACAGATCTTGGCGAGCTCAAGCGGCGCG 1140
Qy 604 TGCAGGAGAGATGTCATCTTCAACTGCGGAGAGCTGTGGCTCCATGCGGCTGTTCG 663
Db 1141 TGCAGGAGAGATGTCATCTTCAACTGCGGAGAGCTGTGGCTCCATGCGGCTGTTCG 1200
Qy 664 CCAAGCGGAGACCCCACTTGTGTCAGCGGCGATGCTGACCAAGCTCAAGTTGAAGTCTTCC 723
Db 1201 CCAAGCGGAGACCCCACTTGTGTCAGCGGCGATGCTGACCAAGCTCAAGTTGAAGTCTTCC 1260
Qy 724 AGCGGGTGAATCATATCATGCGGAGAGGACACATCGGAGAGAGATGTAATTCATCGAGC 783
Db 1261 AGCGGGTGAATCATATCATGCGGAGAGGACACATCGGAGAGAGATGTAATTCATCGAGC 1320
Qy 784 ACAGGCTGTCAGAGGCTGCTCACTAAGAGGCAAGAGATGTAAGTGTCCGATGCGCTCT 843
Db 1321 ACAGGCTGTCAGAGGCTGCTCACTAAGAGGCAAGAGATGTAAGTGTCCGATGCGCTCT 1380
Qy 844 ACTTCGGGAGATGTCGCTGCTCAACCGGCGGCGCGGCGGAGAGGCTGCGGCTGCA 903
Db 1381 ACTTCGGGAGATGTCGCTGCTCAACCGGCGGCGCGGAGAGGCTGCGGCTGCA 1440
Qy 904 CTTACTGCGGCTTATTCGCTGAGGCTGAGCAACTTCAACAGAGTGTGAGAGTGAAGT 963
Db 1441 CTTACTGCGGCTTATTCGCTGAGGCTGAGCAACTTCAACAGAGTGTGAGAGTGAAGT 1500
Qy 964 CCATGATGCGGCGGCTTGAAGAGGTCATGACCGGCTGAGACCGCATGGCAAGA 1023
Db 1501 CCATGATGCGGCGGCTTGAAGAGGTCATGACCGGCTGAGACCGCATGGCAAGA 1560
Qy 1024 AGAATTCATCTCTCTGCAACAAGTGGACGATGACCTCAACTGGGCGGTATTCAACAAC 1083
Db 1561 AGAATTCATCTCTCTGCAACAAGTGGACGATGACCTCAACTGGGCGGTATTCAACAAC 1620
Qy 1084 AGAAGACGCGCATCATCTCAAGAGTGTCAAGTACGACCGCGAGATGTCACAGAGCGG 1143
Db 1621 AGAAGACGCGCATCATCTCAAGAGTGTCAAGTACGACCGCGAGATGTCACAGAGCGG 1680
Qy 1144 AGCTGGGCTCAGCGCGTGGGCTTTCGCGCGCGCGCGCGCGCGCA-GTCACTCG 1202
Db 1681 AGCTGGG-TCAAGCGGTGGGCTTTCGCGCGCGCGCGCGCGCGCAAGTCACTTCG 1739
Qy 1203 GCCATCGCCACGCTGACAGAGGCGGCGCGCATGAGCTTCTGCGCGAG 1250
Db 1740 GCCATCGCCACGCTGACAGAGGCGGCGCGCATGAGCTTCTGCGCGAG 1787
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RESULT 5

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US-10-753-991-40
; Sequence 40, Application US/10753991
; Publication No. US20040142421A1
; GENERAL INFORMATION:
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APPLICANT: Kandel, Eric R.
 APPLICANT: Santoro, Bina
 APPLICANT: Bartsch, Dusan
 APPLICANT: Siegelbaum, Steven
 APPLICANT: Tibbs, Gareth
 APPLICANT: Grant, Seth
 TITLE OF INVENTION: Brain or Heart Cyclic Nucleotide Gated Ion Channel and
 TITLE OF INVENTION: Uses Thereof
 FILE REFERENCE: 0575/54806-A
 CURRENT APPLICATION NUMBER: US/10/753,991
 CURRENT FILING DATE: 2004-01-07
 EARLIER APPLICATION NUMBER: 09/086,436
 EARLIER FILING DATE: 1998-05-28
 NUMBER OF SEQ ID NOS: 67
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO 40
 LENGTH: 1792
 TYPE: DNA
 ORGANISM: Human
 US-10-753-991-40

Query Match 89.9%; Score 1207; DB 19; Length 1792;
 Best Local Similarity 99.0%; Pred. No. 8.7e-311;
 Matches 1235; Conservative 0; Mismatches 11; Indels 2; Gaps 2;

QY 4 TGGGCTTACCAAGATCTCTAGGCTCTGCGGCTGCGCTCTCAAGGCTGATCCGCT 63
 DB 541 TGGGCTTACCAAGATCTCTAGGCTCTGCGGCTGCGCTCTCAAGGCTGATCCGCT 600
 QY 64 ACATCCATCAGTGGAGAGATCTTCCATGACCTTATGACCTGCGCAGCGCGGTATGA 123
 DB 601 ACATCCATCAGTGGAGAGATCTTCCATGACCTTATGACCTGCGCAGCGCGGTATGA 660
 QY 124 GGATCTGCAATCTCATGACGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 183
 DB 661 GGATCTGCAATCTCATGACGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
 QY 184 TCCGTGAGCCCATGCTGAGAGATCTTCCGCGCACTGCTGAGGTGCTCATGATGAGCAT 243
 DB 721 TCCGTGAGCCCATGCTGAGAGATCTTCCGCGCACTGCTGAGGTGCTCATGATGAGCAT 780
 QY 244 TGAACCACTCGTGAAGTGAATCTGATCTTCTGCACTTCTGCAAGGCGCATGAGCCATG 303
 DB 781 TGAACCACTCGTGAAGTGAATCTGATCTTCTGCACTTCTGCAAGGCGCATGAGCCATG 840
 QY 304 TGTGATCGGCTGAGCG 363
 DB 841 TGTGATCGGCTGAGCG 900
 QY 364 TCAAGCATGATGTTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT 423
 DB 901 TCAAGCATGATGTTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT 960
 QY 424 TCCAGTGGCTGAGTCTCTCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 483
 DB 961 TCCAGTGGCTGAGTCTCTCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1020
 QY 484 ACATGTCCTTCCACAGCTGCGCACTGCTTCCGCGCAGAGATCCAGCATCTATGAGC 543
 DB 1021 ACATGTCCTTCCACAGCTGCGCACTGCTTCCGCGCAGAGATCCAGCATCTATGAGC 1080
 QY 544 ACCGTTACCAAGAGATGTTTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 603
 DB 1081 ACCGTTACCAAGAGATGTTTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1140
 QY 604 TGGCGGAGAGATGCTCAACTTCACTGCGGAGAGTGGTGGCTCCATGCGCGCTGTTG 663
 DB 1141 TGGCGGAGAGATGCTCAACTTCACTGCGGAGAGTGGTGGCTCCATGCGCGCTGTTG 1200
 QY 664 CCAAGCGCGAGCCCACTTGTGACGCGCATGCTGACCAAGCTCAAGTTGAGAGTCTTCC 723
 DB 1201 CCAAGCGCGAGCCCACTTGTGACGCGCATGCTGACCAAGCTCAAGTTGAGAGTCTTCC 1260

QY 724 AGCGGGTGAATCATCATCCGAGAGCAACATCGGAGAGAGATGATCTTCAATCCAGC 783
 DB 1261 AGCGGGTGAATCATCATCCGAGAGCAACATCGGAGAGAGATGATCTTCAATCCAGC 1320
 QY 784 AGCGGGTGAATCATCATCCGAGAGCAACATCGGAGAGAGATGATCTTCAATCCAGC 843
 DB 1321 AGCGGGTGAATCATCATCCGAGAGCAACATCGGAGAGAGATGATCTTCAATCCAGC 1380
 QY 844 ACTTCGGGAGATGCTGCTGCTCAACCGGGGCGCGCGCGCGCGCGCGCGCGCGCGCG 903
 DB 1381 ACTTCGGGAGATGCTGCTGCTCAACCGGGGCGCGCGCGCGCGCGCGCGCGCGCGCG 1440
 QY 904 CTTACTGCGCTCTTATTCCTGAGCGAGCAACTTCAAGAGTCTGAGAGAGTACC 963
 DB 1441 CTTACTGCGCTCTTATTCCTGAGCGAGCAACTTCAAGAGTCTGAGAGAGTACC 1500
 QY 964 CCATGATGCGCGCGCTTGAAGCGGTGATCGACCGCTGAGACCGCATCGGCAAGA 1023
 DB 1501 CCATGATGCGCGCGCTTGAAGCGGTGATCGACCGCTGAGACCGCATCGGCAAGA 1560
 QY 1024 AGAATTCATCTCTGAGAGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 1083
 DB 1561 AGAATTCATCTCTGAGAGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 1620
 QY 1084 AGAGAGAGCGCATCATCAGAGAGATCGTCAAGTACGACCGCGAGATGTCAGAGAGCG 1143
 DB 1621 AGAGAGAGCGCATCATCAGAGAGATCGTCAAGTACGACCGCGAGATGTCAGAGAGCG 1680
 QY 1144 AGCTGGGCTCAGCGCGCTTCTTCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1202
 DB 1681 AGCTGGG-TCAGCGCGCTTCTTCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1739
 QY 1203 GCAATGCGCAGCGTGCAGAGCGCGCGCGCGCGCATGAGCTTCCGCGCGAG 1250
 DB 1740 GCAATGCGCAGCGTGCAGAGCGCGCGCGCGCGCATGAGCTTCCGCGCGAG 1787

RESULT 6

US-10-384-107-11
 Sequence 11, Application US/10384107
 Publication No. US20050003477A1
 GENERAL INFORMATION:
 APPLICANT: The Trustees of Columbia University
 APPLICANT: Kandel, Eric R.
 APPLICANT: Santoro, Bina
 APPLICANT: Bartsch, Dusan
 APPLICANT: Siegelbaum, Steven
 APPLICANT: Tibbs, Gareth
 APPLICANT: Grant, Seth
 TITLE OF INVENTION: Pacemaker Channel Proteins and Uses Thereof
 FILE REFERENCE: 0575/54806-B
 CURRENT APPLICATION NUMBER: US/10/384,107
 PRIOR FILING DATE: 2003-03-06
 PRIOR FILING DATE: 1997-12-23
 NUMBER OF SEQ ID NOS: 60
 SOFTWARE: PatentIn version 3.1
 SEQ ID NO 11
 LENGTH: 1790
 TYPE: DNA
 ORGANISM: human;
 US-10-384-107-11

Query Match 89.0%; Score 1194.4; DB 21; Length 1790;
 Best Local Similarity 98.9%; Pred. No. 2e-307;
 Matches 1234; Conservative 0; Mismatches 11; Indels 3; Gaps 3;

QY 4 TGGGCTTACCAAGATCTCTAGGCTCTGCGGCTGCGGCTCTCAAGGCTGATCCGCT 63
 DB 540 TGGGCTTACCAAGATCTCTAGGCTCTGCGGCTGCGGCTCTCAAGGCTGATCCGCT 599
 QY 64 ACATCCATCAGTGGAGAGATCTTCCATGACCTTATGACCTGCGCAGCGCGGTATGA 123

Db	600	ACATCATTCACTGAGGAGGAGATCTTCCACATGACCTTATGACCTTGCCAGCGCGGTGATG	655
Qy	124	GGATTCGCAATCTCATCAGCAATGATGCGTGTCTGTGCACTGGGAGCGGCTGCTGAGT	183
Db	660	GGATTCGCAATCTCATCAGCAATGATGCGTGTCTGTGCACTGGGAGCGGCTGCTGAGT	719
Qy	184	TCCTGATGCCCATGCTGACAGACTTCCCGGCCCACTGCTGGGTCTCATCAATGGCAATG	243
Db	720	TCCTGATGCCCATGCTGACAGACTTCCCGGCCCACTGCTGGGTCTCATCAATGGCAATG	779
Qy	244	TGAACCACTCGGAGGTGAACTGTACTCTTTGCACTCTTCAAGGACCATGAGCCACATG	303
Db	780	TGAACCACTCGGAGGTGAACTGTACTCTTTGCACTCTTCAAGGACCATGAGCCACATG	839
Qy	304	TGTGATCGGGGTACGGCCGGCGGCGCCGACGAGCATACGACATCTGCTGACATG	363
Db	840	TGTGATCGGGGTACGGCCGGCGGCGCCGACGAGCATACGACATCTGCTGACATG	899
Qy	364	TCAGACATATTTGTGGGTGCGACCTGCTACGCAATTTTATGCGGCACGCCACTGCTCT	423
Db	900	TCAGACATATTTGTGGGTGCGACCTGCTACGCAATTTTATGCGGCACGCCACTGCTCT	959
Qy	424	TCGATCGCTGACCTCTCGCGGCGCGCATACGAGAAATTAACAAGAGGTGAGAGT	483
Db	960	TCGATCGCTGACCTCTCGCGGCGCGCATACGAGAAATTAACAAGAGGTGAGAGT	1019
Qy	484	ACATGTCCTTCCAAAGCTGCGACGTGACTTCCGCAABAATACAGACTATCTATGAC	543
Db	1020	ACATGTCCTTCCAAAGCTGCGACGTGACTTCCGCAABAATACAGACTATCTATGAC	1079
Qy	544	ACCGTTACAGGGGAAAGATGTTTGAACAGAGACAGATCTCTGGGAGGTCAAAGGGCC	603
Db	1080	ACCGTTACAGGGGAAAGATGTTTGAACAGAGACAGATCTCTGGGAGGTCAAAGGGCC	1139
Qy	604	TGCGGAGAGATGCTGCACTTCAACCTCGCGGAAAGCTGATGCTCCATGCGCTGTGG	663
Db	1140	TGCGGAGAGATGCTGCACTTCAACCTCGCGGAAAGCTGATGCTCCATGCGCTGTGG	1199
Qy	664	CGAAGCGCGACCCGCAATTCGTCAGCGGCATGTCGACAACTGACATTCGAGGTCTTC	723
Db	1200	CGAAGCGCGACCCGCAATTCGTCAGCGGCATGTCGACAACTGACATTCGAGGTCTTC	1259
Qy	724	AGCGCGGTGACTATTCATCCGCGAAGGACCATGCGGAAAGATGTAATCTTATCCAG	783
Db	1260	AGCGCGGTGACTATTCATCCGCGAAGGACCATGCGGAAAGATGTAATCTTATCCAG	1319
Qy	784	ACGCGGTGCTCAGCGTGTCTCACTTAAGGGGCAACAAGAGATGAAGCTTTCGATGGCT	843
Db	1320	ACGCGGTGCTCAGCGTGTCTCACTTAAGGGGCAACAAGAGATGAAGCTTTCGATGGCT	1379
Qy	844	ACTTGGGGAGATGTCGCTGTCAACCGGGGCGCGCCGCAAGCGCGAGCTGCGGGCTTGA	903
Db	1380	ACTTGGGGAGATGTCGCTGTCAACCGGGGCGCGCCGCAAGCGCGAGCTGCGGGCTTGA	1438
Qy	904	CCTACTGCGCCTCTATATTCGCTGAGCGTGGACAACTTCAACGAGGTGCTGAGAGATAC	963
Db	1439	CCTACTGCGCCTCTATATTCGCTGAGCGTGGACAACTTCAACGAGGTGCTGAGAGATAC	1498
Qy	964	CCATGATGCGCGCGCTTTCAGACCGGTGGCCATGACCGCTGTGACCGCATCGGCAAGA	1023
Db	1499	CCATGATGCGCGCGCTTTCAGACCGGTGGCCATGACCGCTGTGACCGCATCGGCAAGA	1558
Qy	1024	AGAAATTCATCTCTCTGCAACAAGTGGACAGACTGACTCAACTCGGGCGTATTCACAAC	1083
Db	1559	AGAAATTCATCTCTCTGCAACAAGTGGACAGACTGACTCAACTCGGGCGTATTCACAAC	1618
Qy	1084	AGGAGAACCCCATTCATCCAGAGATGCTGAAGTACGACCGCGAGATGTTGACGACGCG	1143
Db	1619	AGGAGAACCCCATTCATCCAGAGATGCTGAAGTACGACCGCGAGATGTTGACGACGCG	1678
Qy	1144	AGCTGGGCTCAACCGCTGGGCTCTTTCGCGCGCGCGCGCGCGCGCGCACTCACTCG	1202
Db	1679	AGCTGGGCTCAACCGCTGGGCTCTTTCGCGCGCGCGCGCGCGCGCGCGCACTCACTCG	1733

QY	1203	GCATTCGCGCAGCGCTGCGAGAGCGCGGGCCATGAGCTTTCGCCCGCAG	1250
DB	1738	GCATTCGCGCAGCGCTGCGAGAGCGCGGGCCATGAGCTTTCGCCCGCAG	1785

RESULT 7

US-10-292-798-2011

/ Sequence 2011, Application US/10292798

/ Publication No. US20030235833A1

GENERAL INFORMATION:

APPLICANT: SUMA, MAKIHO

APPLICANT: ASAI, KIYOSHI

APPLICANT: AKIYAMA, YUTAKA

APPLICANT: ABEYARANT, HIRUYUKI

TITLE OF INVENTION: GUANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS

FILE REFERENCE: 094335/166

CURRENT APPLICATION NUMBER: 2002-11-13

PRIOR APPLICATION NUMBER: US/10/292,798

PRIOR FILING DATE: 2001-12-18

PRIOR APPLICATION NUMBER: JP 2001-246789

PRIOR FILING DATE: 2001-06-18

NUMBER OF SEQ ID NOS: 2070

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 2011

LENGTH: 2125

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

LOCATION: source

FEATURE:

LOCATION: (1) .. (2125)

FEATURE:

NAME/KEY: CDS

LOCATION: (201) .. (1724)

FEATURE:

NAME/KEY: CDS

LOCATION: (1767) .. (1925)

US-10-292-798-2011

QY	4	TGCGCTTCAACCAAGATCTCTCAGCGCTCTGCGGCTGCTGCGGCTCTCTCAGCGCTTACGCTTCCGCT	63
DB	688	TGCGCTTCAACCAAGATCTCTCAGCGCTCTGCGGCTGCTGCGGCTCTCTCAGCGCTTACGCTTCCGCT	747

Query Match 88.8%; Score 1191.6; DB 17; Length 2125;

Best Local Similarity 95.2%; Fred. No. 1.1e-306;

Matches 1276; Conservative 7; Mismatches 47; Indels 10; Gaps 5

QY	64	ACATTCATCAGTGGAGAGAGATCTTCCACATGACCTATGACCTTGGCCAGCGCGGTGATGA	123
DB	748 <th>ACATTCACAGTGGAGAGAGATCTTCCACATGACCTATGACCTTGGCCAGCGCGGTGATGA</th> <th>807</th>	ACATTCACAGTGGAGAGAGATCTTCCACATGACCTATGACCTTGGCCAGCGCGGTGATGA	807

QY	124	GGATTCGCAATCTCATCGCATGATGCTGCTCTTGC-CATCTGGAGCGGCTGCTCGAGT	183
DB	808 <th>GGTTTCGCAACCTCATCGATGATGATGCTGCTCTTGC-CATCTGGAGATGCTGCTCGAGT</th> <th>867</th>	GGTTTCGCAACCTCATCGATGATGATGCTGCTCTTGC-CATCTGGAGATGCTGCTCGAGT	867

QY	184	TCCTGTGTCGCCATGCTGCGAGCATTTCCGCGCACTGCTGCTGCTGCTCATTAATGAGCATGG	243
DB	868 <th>TCCTGTGTCGCCATGCTGCGAGCATTTCCGCGCACTGCTGCTGCTGCTCATTAATGAGCATGG</th> <th>927</th>	TCCTGTGTCGCCATGCTGCGAGCATTTCCGCGCACTGCTGCTGCTGCTCATTAATGAGCATGG	927

QY	244	TGAACCACTGCTGAGAGTAACTGTACTCTTTCGCACTTTCAGAGGCATGAGCCCATGTC	303
DB	928 <th>TGAACCACTGCTGAGAGCAAACTGTATCTTTCGCACTTTCAGAGGCATGAGCCCATGTC</th> <th>987</th>	TGAACCACTGCTGAGAGCAAACTGTATCTTTCGCACTTTCAGAGGCATGAGCCCATGTC	987

QY	304	TGTGATCGGGATACGGCCCGGAGCGGCCCGAGAGCATGACCGAGCATCTGTGCTGACCATGC	363
DB	988 <th>TGTGATTCGGGATATGCCGGGAGCGGCCCGAGAGCATGACCGAGCATCTGTGCTGACCATGC</th> <th>1047</th>	TGTGATTCGGGATATGCCGGGAGCGGCCCGAGAGCATGACCGAGCATCTGTGCTGACCATGC	1047

QY	364	TCAGCATGATCTGTGGGTGCGCATCTGCTACGCGCATGTTTCATCGGACGAGCCCATGCGCTTCA	423
DB	1048 <th>TCAGCATGATCTGTGGGTGCGCATCTGCTACGCGCATGTTTCATCGGACGAGCCCATGCGCTTCA</th> <th>1107</th>	TCAGCATGATCTGTGGGTGCGCATCTGCTACGCGCATGTTTCATCGGACGAGCCCATGCGCTTCA	1107

QY	424	TCGACCTCGTGAACCTCTCGCGCGCCACGTATACAGAGAAAGTAAAGGAGGTGGAGACGT	483
Db	1108	TCGACCTCGTGAACCTCTCGCGCGCCCAATACCC--AGAAAGTAAAGGAGGTGGAGACGT	116
QY	484	ACATGTCTTCCACAAAGCTGCACAGCTGTACTTCCGCGAGAAAGATCCACGACTCTATAGC	543
Db	1165	ACATGTCTTCCACAAAGCTGCAGCGCGCACTTCCGCGAGAAAGATCCACGACTCTATAGCAGC	122
QY	544	ACCGTTACCAAGGCGAAAGATGTTTGAACGAGACAGCATCTCTGGGCGAAGCTCAACGGGCCCC	603
Db	1225	ACCGTTACCAAGGCGAAAGATGTTTGAACGAGACAGCATCTCTGGGCGAAGCTCAACGGGCCCC	128
QY	604	TGCGGGAGAGATTCGTCAACTTCAACTGCGCGGAACCTGTGCGCTCAATGCCGCTGTTCG	663
Db	1285	TGCGGGAGAGATTCGTCAACTTCAACTGCGCGGAACCTGTGCGCTCAATGCCGCTGTTCG	134
QY	664	CCAAAGCGGACCCCAACTTTCGTCAAGCGGCATCTGACCAAGCTCAAGTTCGAGGCTTCC	723
Db	1345	CCAAATGCTGACCCCAACTTTCGTCAAGCGGCATCTGACCAAGCTCAAGTTCGAGGCTTCC	140
QY	724	AGCGGGGTGACTACATCATTCGCGCAAGGACCATGTGGGAGAGATGTATCTTCAATCCAGC	783
Db	1405	AGCGGGGTGACTACATCTCAATCCGCGAAGGACCATGTGG--GAAAGATGTACTTCAATTCAGC	1461
QY	784	ACGGGCTGTGACGGTGTCACTAAGGGGCAACAAGAGATGAAGTGTCCATGGCTCTCT	843
Db	1462	ACGGGCTGTGACGGTGTCTCGTTAAGGGGCAACAAGAGATGAAGTGTTCATGTCTCTCT	1521
QY	844	ACTTCGCGGAGATCTGCCTGTCTCAACCCGGGGGCGCGGACGGCGAGCGGTGCGGCTGACA	903
Db	1522	ACTTCGAGAGATCTGCCTGTCTCAACCCGGGGGCAACCGATGGCGAGCGGTGCGGCGCAACA	1581
QY	904	CCCTACTGCGCCTTATTTTCGTGTAGCGGTGACCAACTTCAACGAGGTGTGAGAGAGTACC	963
Db	1582	CCCTATTCGCGCCTCTTTCGTGTAGCGGTGACCAACTTCAACGAGGTGTGTGAGAGAGTACC	1641
QY	964	CCATGATGCGGGGCGGCGCTTTCGAGACGGGTGGCATGTGACCCGCTGTGACCGGCAACGACA	1022
Db	1642	CCATGATGCGGGGCGGCGCTTTCGAGAGGGGTGGCCATGTGACCCGCTGTGACCGGCAACGACA	1701
QY	1024	AGAAATTCATCTCTCTGTGCAAAAGGTGCAGCATGACCTCAACTCGGGGCGTATTTCAACAACC	1083
Db	1702	AGAAATTCATCTCTCTGTGCAAAAGGTGCAGCATGACCTTAACTCGGGGCGTATTTCAACAACC	1761
QY	1084	AGGAGAAAGCCATCATTCAGAGAGATCGTCAAGTACGACCGGAGATGTGTGACGACGCGCG	1143
Db	1762	AGTAGAAAGCCATCATTCAGAGAGATCGTCAAGTACGAGGAGATGTGTGACGACGCGCG	1821
QY	1144	AGCTGGGCTCAGCGGTGGGCGCTTTCGCGCGCGCGCGCGCGCGCGCAGTCACTCTGG	1203
Db	1822	AGCTGGG--TCAGCGCGCTGGGCGCTTTCGCGCGCGCGCGCGCGCGCAG--GTCACTCTGG	1878
QY	1204	CCATTCGCAACCTGTGAGAGGCGGCGCGCATATGAGCTTTCGCGCGCA--GTGGCGGGGCGCG	1262
Db	1879	CCATTCGCAACCTGTGAGAGGCGGCGCGCATATGAGCTTTCGCGCGCAGGTGGGCGGCGCGCG	1938
QY	1263	TCGTGGGAGCGCTGTGCGCTTCGCGCTTCGCGCGCGCTGTGTGCGGCGYNDYHCCCGGAGGCG	1322
Db	1939	TCGTGGGAGCGCGTGTGCGCTTCGCGCTTCGCGCGCGCTGTGTGCGGCGCGCGCGCGGCGCG	1998
QY	1323	CACCTGCGCCNCTCAACC 1342	
Db	1999	CACCTGCGCGCGCTCAACC 2018	

RESULT 8
US-10-017-161-2369
: Sequence 2369, Application US/10017164
: Publication No. US20030143668A1
: GENERAL INFORMATION:
: APPLICANT: SUMA, MAKIKO
: APPLICANT: ASAI, KIYOSHI
: APPLICANT: AKIYAMA, YUTAKA

```

? APPLICANT: ABRARATANI, HIROYUKI
? TITLE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTORS
? FILE REFERENCE: 084335/0152
? CURRENT APPLICATION NUMBER: US/10/017.161
? CURRENT FILING DATE: 2002-12-18
? PRIOR APPLICATION NUMBER: JP 2001/246789
? PRIOR FILING DATE: 2001-06-18
? NUMBER OF SEQ ID NOS: 2430
? SOFTWARE: PatentIn Ver. 2.1
? SEQ ID NO 2369

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? Type: DNA
? ORGANISM: Homo sapiens
? FEATURE:
? NAME/KEY: source
? LOCATION: (1)..(1966)
? FEATURE:
? NAME/KEY: CDS
? LOCATION: (201)..(1766)
? FEATURE:
? NAME/KEY: modified_base
? LOCATION: (7)..(106)
? OTHER INFORMATION: a, t, c, g, unknown or other
? FEATURE:
? NAME/KEY: modified_base
? LOCATION: (139)
? OTHER INFORMATION: a, t, c, g, unknown or other
? FEATURE:
? NAME/KEY: modified_base
? LOCATION: (1915)..(1966)
? OTHER INFORMATION: a, t, c, g, unknown or other
? OS-10-017-161-2369

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Query Match	82.7%;	Score 1109.2;	DB 15;	Length 1966;
Best Local Similarity	95.8%;	Pred. No. 9.1e-285;		
Matches 1184; Conservative	0;	Mismatches 43;	Indels 9;	Gaps 4

QY	4	TGCGCTTCACCAAGATCTCTCAGGCTCTGCGGGCTGCTGCGCTCTCAGCGCTGATCCGT	63
Db	688	TGCGCTTCACCAAGATCTCTCAGCTCTGCGGGCTGCTGCGCTCTCAGCGCTGATCCGT	747
QY	64	ACATCCATCGTGGGAGGAGATCTTCCACATGACCTTATGACTCTGGCCAGCGCGGGTAGTA	123
Db	748	ACATCCACCGATGGGAGGAGATCTTCCACATGACCTTATGACTCTGGCCAGCGCGGGTAGTC	807
QY	124	GGATCTGCAATCTCATCAGCATGATGCTGCTCTGCGCATGCGGACGGTCTCGCAGT	183
Db	808	GGTTCGCAACCTCATCATGATGATGCTGCTGCTCTGCGCATGCGGATGGTCTCGCAGT	867
QY	184	TCTGTGTCCTATGCTGCAAGACTTCCCGCGCACTGCTGGGTGTCTCATATGGCATGG	243
Db	868	TCTGTGTCCTATGCTGCAAGACTTCCCGATCATCTGCTGGGTGTCTCATATGGCATGG	927
QY	244	TGAACCATCTGTGGAGTGAACTGTACTCTCTGCACTTTCAAGGCCATGAGCCACATGC	303
Db	928	TGAACCATCTGTGGAGTGAACTGTACTCTCTGCACTTTCAAGGCCATGAGCCACATGC	987
QY	304	TGTGCATCGGGTACGGCGCGGACGGCCGAGACATGACGAGCATCTGCGTACCATGC	363
Db	988	TGTGCATTTGGGTATGCGCGGACGGCCGAGACATGACGAGCATCTGCGTACCATGC	1047
QY	364	TCAGCATGATTTGTGGGTGCACCTGTACGCGCATTTATCGGGCAGCGCCACTGCGCTCA	423
Db	1048	TCAGCATGATTTGTGGGTGCACCTGTACGCGCATTTATCGGGCAGCGCCACTGCGCTCA	1107
QY	424	TTCAGTGTGCTGGAATCTCTCGCGGCGCAATGCCAGAGAAAGTACAAGCAGGTGAGCAGT	483
Db	1108	TTCAGTGTGCTGGAATCTCTCGCGGCGCAATGCCAGAGAAAGTACAAGCAGGTGAGCAGT	1167
QY	484	ACATGTCTTCCACAAGCTGCGCAGTGAATTTCCGCGCAAGAAATCCAGACATATCATATAGC	543
Db	1165	ACATGTCTTCCACAAGCTGCGCGCGCAATTTCCGCGCAAGAAATCCAGACATATCATATAGC	1224

OY 544 ACCGTTACAGAGGAGATGTTTGAACGAGACAGCATCTGGGCGAGGCTCAACGGGCCCC 603
DB 1225 ACCGTTACAGAGGAGATGTTTGAACGAGACAGCATCTGGGCGAGGCTCAACGGGCCCC 1284
OY 604 TGGCGGAGAGATGCTCACTTCACTCCGGAACTGTGTCTCCATGCGCGCTTTCCG 663
DB 1285 TGGCGGAGAGATGCTCACTTCACTCCGGAACTGTGTCTCCATGCGCGCTTTCCG 1344
OY 664 CCAACGCCGACCCCACTTGTCTACGAGCATGTGTGACCAAGCTCAAGTTGAGAGTCTTCC 723
DB 1345 CCAATGTGTACCCCACTTGTCTACGAGCATGTGTGACCAAGCTCAAGTTGAGAGTCTTCC 1404
OY 724 AGCGGGGTGACTCATCTATCCGCGAAGGACCATCGGAGAAAGTGTACTTCAATCCAGC 783
DB 1405 AGCGGGGTGACTCATCTATCCGCGAAGGACCATCGGAGAAAGTGTACTTCAATCCAGC 1461
OY 784 AGCGGGGTGACTCATCTATCCGCGAAGGACCATCGGAGAAAGTGTACTTCAATCCAGC 843
DB 1462 AGCGGGGTGACTCATCTATCCGCGAAGGACCATCGGAGAAAGTGTACTTCAATCCAGC 1521
OY 844 ACTTCGGGAGATGCTGCTGTCAACCGGGGCGCGGACGCGGAGCGGTGCGGCTGTACA 903
DB 1522 ACTTCGGGAGATGCTGCTGTCAACCGGGGCGCGGACGCGGAGCGGTGCGGCTGTACA 1581
OY 904 CCTACTGCGCGCTCTATTGCTGAGCGTGTGACCAACTTTCAGAGGTGTGTGAGAGGTACC 963
DB 1582 CCTATTGCGCGCTCTATTGCTGAGCGTGTGACCAACTTTCAGAGGTGTGTGAGAGGTACC 1641
OY 964 CCATGATGCGGCGCGCTTCGAGAGCGGTGCGCATGACCGGCTGTGACCGCATCGGCAAGA 1023
DB 1642 CCATGATGCGGCGCGCTTCGAGAGCGGTGCGCATGACCGGCTGTGACCGCATCGGCAAGA 1701
OY 1024 AGAATTCATCTCTCTGTGACAGAGTGTGACGATGATCACTCGGCGGTATTTCACAACAC 1083
DB 1702 AGAATTCATCTCTCTGTGACAGAGTGTGACGATGATCACTCGGCGGTATTTCACAACAC 1761
OY 1084 AGGAGAACGCATCATTCAGAGATGCTGACAGTACGCGGAGATGTGTGAGACAGGCGG 1143
DB 1762 AGTGAAGCCCATCATTCAGAGATGCTGACAGTACGCGGAGATGTGTGAGACAGGCGG 1821
OY 1144 AGCTGGGCTGAGCGGTGCGCTCTTCCGCGCGCGCGCGCGCGCGCGCATGCTTCCG 1203
DB 1822 AGCTGGGCTGAGCGGTGCGCTCTTCCGCGCGCGCGCGCGCGCGCGCATGCTTCCG 1878
OY 1204 CCATGCGCACCTGTGACAGGCGCGCGCATGAGCT 1239
DB 1879 CCATGCGCACCTGTGACAGGCGCGCGCATGAGCT 1914

RESULT 9
US-10-067-457-6
; Sequence 6, Application US/10067457
; Publication No. US20030082513A1
; GENERAL INFORMATION:
; APPLICANT: Aventis Pharma Deutschland GmbH
; TITLE OF INVENTION: Process for identifying substances which modulate the
; FILE REFERENCE: AVE D-2000/A006
; CURRENT FILING DATE: 2002-04-09
; PRIOR APPLICATION NUMBER: US/10/067,457
; PRIOR FILING DATE: 2001-02-09
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 3102
; TYPE: DNA
; ORGANISM: Murinae gen. sp.
US-10-067-457-6

Query Match 78.1%; Score 1048.6; DB 14; Length 3102;
Best Local Similarity 87.6%; Pred. 1.3e-268;
Matches 1173; Conservative 6; Mismatches 156; Indels 4; Gaps 3;

OY 4 TGGCGTTACAAAGATCTGAGGCTGTGGGCTGTGGGCTGTGACGCGCTGATCCGCT 63
DB 931 TGGCGTTACAAAGATCTGAGGCTGTGGGCTGTGGGCTGTGACGCGCTGATCCGCT 990
OY 64 ACATCCATCAGTGGAGAGATCTTTCACATGACCTTATGACTTGTGCGGCGGCTGATGA 123
DB 991 ATATCCACAGTGGAGAGATTTTTCACATGACCTTATGACTTGTGCGGCGGCTGATG 1050
OY 124 GGAATCGCAATCTCATCAGCATGATGTGTGCTCTGACCATGCGGAGCGCTGCTGCAAT 183
DB 1051 GCAATCTGTAACCTGATCAGATGATGATGCTGCTGTGCGCATGCGGAGCGGTGCTGCAAT 1110
OY 184 TCTGTGTGCGCATGCTGTGAGAACTTCCGCGCAACTGTGTGTGTGTCATCAATGACATGG 243
DB 1111 TCTGTGTGCGCATGCTGTGAGAACTTCCGCGCAACTGTGTGTGTGTCATCAATGACATGG 1170
OY 244 TGAACCACTGTGTGAGTGAATCTGATCTTGTGCACTTTCAGAGCCATGAGCCACATGC 303
DB 1171 TGAACCACTGTGTGAGTGAATCTGATCTTGTGCACTTTCAGAGCCATGAGCCACATGC 1230
OY 304 TGTGATCGGAGTACGCGCGGAGGCGCGCGAGAGCATGACGGAATCTGTGCTGACATGC 363
DB 1231 TGTGATCGGAGTACGCGCGGAGGCGCGCGAGAGCATGACGGAATCTGTGCTGACATGC 1290
OY 364 TCAAGCATGATTTGTGGGTGCGCACCTGTGATACGCAATGTTTCACTGCGGCAACGCGCATGCCTCA 423
DB 1291 TCAAGCATGATTTGTGGGTGCGCACCTGTGATACGCAATGTTTCACTGCGGCAACGCGCATGCCTCA 1350
OY 424 TCCAGTGTGAGTCTCTCTGCGGCGCGCAGTACCAAGAGAGATCAAGAGGTGAGAGT 483
DB 1351 TCCAGTGTGAGTCTCTCTGCGGCGCGCAGTACCAAGAGAGATCAAGAGGTGAGAGT 1410
OY 484 ACATGTCTTTCACAACATGCTGACGCTGATCTTCCGCGAGAGATTCACAGTACTATGAG 543
DB 1411 ACATGTCTTTCACAACATGCTGACGCTGATCTTCCGCGAGAGATTCACAGTACTATGAG 1470
OY 544 ACCGTTACAGAGGAGATGTTTGAACGAGACAGCATCTGGGCGAGCTCAACGGGCGG 603
DB 1471 ACCGTTACAGAGGAGATGTTTGAACGAGACAGCATCTGGGCGAGCTCAACGGGCGG 1530
OY 604 TGGCGGAGAGATGCTCACTTCACTCCGGAACTGTGTGCTCTGATGCGCGCTGTCCG 663
DB 1531 TGGCGGAGAGATGCTCACTTCACTCCGGAACTGTGTGCTCTGATGCGCGCTGTCCG 1590
OY 664 CCAACGCCGACCCCACTTGTCTACGAGCATGTGTGACCAAGCTCAAGTTGAGAGTCTTCC 723
DB 1591 CCAATGTGACAGCCCACTTGTCTACGAGCATGTGTGACCAAGCTCAAGTTGAGAGTCTTCC 1650
OY 724 AGCGGGGTGACTCATCTATCCGCGAAGGACCATCGGAGAAAGTGTACTTCAATCCAGC 783
DB 1651 AGCGGGGTGACTCATCTATCCGCGAAGGACCATCGGAGAAAGTGTACTTCAATCCAGC 1710
OY 784 AGCGGGGTGACTCATCTATCCGCGAAGGACCATCGGAGAAAGTGTACTTCAATCCAGC 843
DB 1711 ATGGAGTGTGAGAGGTGCTTCAACAAAGGCAAGAGATGAAGCTGTGCAATGAGCTCTCT 1770
OY 844 ACTTCGGGAGATGCTGCTGTCAACCGGGGCGCGGACGCGGAGCGGTGCGGCTGTACA 903
DB 1771 ACTTCGGGAGATGCTGCTGTCTCAACGAGGGGCGCGGCTTACGCGGCGAGGCTGTACA 1830
OY 904 CCTACTGCGCGCTCTATTGCTGAGCGTGTGACCAACTTTCAGAGGTGTGTGAGAGATGAC 963
DB 1831 CCTACTGCGCGCTCTATTGCTGAGCGTGTGACCAACTTTCAGAGGTGTGTGAGAGATGAC 1890
OY 964 CCATGATGCGGCGCGCTTCGAGAGCGGTGCGCATGACCGCTGTGACCGCATCGGCAAGA 1023
DB 1891 CCATGATGCGGCGCGCTTCGAGAGCGGTGCGCATGACCGCTGTGACCGCATCGGCAAGA 1950
OY 1024 AGAATTCATCTCTCTGTGACAGAGTGTGACGATGATCACTGAGGTGTGTTCACAACAC 1083
DB 1951 AGAATTCATCTCTCTGTGACAGAGTGTGACGATGATCACTGAGGTGTGTTCACAACAC 2010


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Qy 1084 AGAGAAAGCCATCATTCAGAGAGATTCGTGAATGACACCGGAGATGTGTGACGAGCGC 1143
Db 2011 AGGAGATGCGCATCATTCAGAGAGATTCGTGAATGACACCGGAGATGTGTGACGAGCGC 2070
Qy 1144 AGCTGGGCTCAGCGCGCTGCTCTTCCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1203
Db 2071 AGCTGGGCTCAGCGCGCTGCTCTTCCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 2127
Qy 1204 CCATGCGCAGCTGCTGAGAGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1262
Db 2128 CCATGCGCAGCTGCTGAGAGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 2187
Qy 1263 TCGTGGGCGCGCTGCGCTGCGCTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1322
Db 2188 TCGTGGGCGCGCTGCGCTGCGCTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 2247
Qy 1323 CACCTGGCGCGCTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1341
Db 2248 TGCCTGCGCGCGCTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 2266

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RESULT 10
US-10-311-795-5
; Sequence 5, Application US/10311795
; Publication No. US2004003943A1
; GENERAL INFORMATION:
; APPLICANT: SmithKline Beecham plc
; TITLE OF INVENTION: New Use
; FILE REFERENCE: P32614
; CURRENT APPLICATION NUMBER: US/10/311,795
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 4751
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-311-795-5

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Query Match 69.1%; Score 927.2; DB 18; Length 4751;
Best Local Similarity 84.7%; Pred. No. 2.7e-236;
Matches 1040; Conservative 0; Mismatches 188; Indels 0; Gaps 0;

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Qy 4 TGCGCTTACCAAGATCTCTGAGCTCTGCGCGCTGCGCGCTGCGCGCTGCGCGCTGCGCGCT 63
Db 2126 TGCGCTTACCAAGATCTCTGAGCTCTGCGCGCTGCGCGCTGCGCGCTGCGCGCTGCGCGCT 2185
Qy 64 ACATCATCAGTGGAGAGATCTTTCACATGACCTTATGACCTTGGCGAGCGCGGTGATGA 123
Db 2186 ATATTACACAGTGGAGAGATCTTTCACATGACCTTATGACCTTGGCGAGCGCGGTGATGA 2245
Qy 124 GGATTCGCAATCTATCATGACATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 183
Db 2246 GCATTCGTGAACCTTATCGGAGTATGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2305
Qy 184 TCCGTGGGCCATGCTGAGAGACTTCCGCGCACTGCTGCGGTGCTGCTGCTGCTGCTGCTGCT 243
Db 2306 TCCGTGGGCCATGCTGAGAGACTTCCGCGCACTGCTGCGGTGCTGCTGCTGCTGCTGCTGCT 2365
Qy 244 TGAACCACTGCTGAGAGATCTTACTCTTTCGACTCTTCAAGGCGCATGAGCCATGTC 303
Db 246 TGAACCACTGCTGAGAGATCTTACTCTTTCGACTCTTCAAGGCGCATGAGCCATGTC 2425
Qy 304 TGTGCAATCGGATGAGCGCGCGAGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 363
Db 2426 TGTGCAATCGGATGAGCGCGCGAGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 2485
Qy 364 TCAGCATGATTTGGTGGCGACCTGCTACCGCATGTTTCATGCGCGACGCGCGCGCGCGCTCA 423
Db 2486 TCAGCATGATTTGGTGGCGACCTGCTACCGCATGTTTCATGCGCGACGCGCGCGCGCGCTCA 2545
Qy 424 TCCAGTGGCTGATCTCTGCGCGCGCGCATGACGAGAGATCAAGCAGGTGAGCAGT 483

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Db 2546 TCCAGTGGCTGATCTCTGCGCGCGCGCATGACGAGAGATCAAGCAGGTGAGCAGT 2605
Qy 484 ACATGCTCTTCCAAGCTGCGAGCTGACTTCCGCGAAGATCCAGTCACTATGAGC 543
Db 2606 ACATGCTCTTCCAAGCTGCGAGCTGCGAGACCGCGAGCGCGCATTCAGACTACAGAGC 2665
Qy 544 ACCGTTACAGAGGCAAGATGTTTGAAGAGACAGCATCTGAGCGAGCTCAAGCGCGCGCG 603
Db 2666 ACCGTTACAGAGGCAAGATGTTTGAAGAGAGAGCATCTGAGCGAGCTCAAGAGCGCGCG 2725
Qy 604 TCGCGGAGAGATGCTGATCACTTCACTGCGGAGAGCTGTGCTGCTGCTGCTGCTGCTGCT 663
Db 2726 TCGCGGAGAGATGCTGATCACTTCACTGCGGAGAGCTGTGCTGCTGCTGCTGCTGCTGCT 2785
Qy 664 CCAAGCGCGACCCCACTTGTGACAGCGCGCATGCTGACAGCTCAAGTTGAGAGCTTCC 723
Db 2786 CCAAGCGCGACCCCACTTGTGACAGCTGCTGACAGCTGCTGCTGCTGCTGCTGCTGCTTCC 2845
Qy 724 AGCGGAGTACTATCATCATCCGGAAGGACACATCGGGAAGAGATGATCTTCAATCCAGC 783
Db 2846 AGCGGAGTACTATCATCATCCGGAAGGACACATTTGGCAAGAGATGATCTTCAATCCAGC 2905
Qy 784 ACCGCGTGTGACGCTGCTCACTAAGGCGCAAGAGATGAAGCTGCTGCTGCTGCTGCTGCT 843
Db 2906 ATGCGCGTGTGACGCTGCTCACTAAGGCGCAAGAGATGAAGCTGCTGCTGCTGCTGCTGCT 2965
Qy 844 ACTTGGGAGAGATCTGCTGCTGCTCAAGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 903
Db 2966 ACTTGGGAGAGATCTGCTGCTGCTCAAGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 3025
Qy 904 CTTACTGCGCGCTCTATTCGCTGAGCGTGAACAATTCAAGAGTGTGAGAGATGAC 963
Db 3026 CTTACTGCGCGCTCTATTCGCTGAGCGTGAACAATTCAAGAGTGTGAGAGATGAC 3085
Qy 964 CCATGATGCGCGCGCTTGAAGCGGTGCGCATGACCGCTGAGACCGCATGCGCAAGA 1023
Db 3086 CCATGATGCGCGCGCTTGAAGCGGTGCGCATGACCGCTGAGACCGCATTGGCAAGA 3145
Qy 1024 AGAATTCATCTCTCTGCAAGAAGTGCAGATGACCTCACTGCGGCTGTTTAAACAAC 1083
Db 3146 AGAATTCATCTCTCTGCAAGAAGTGCAGATGACCTCACTGCGGCTGTTTAAACAAC 3205
Qy 1084 AGAGAAAGCCATCATTCAGAGAGATGCTCAAGTACGACCGGAGATGATGTCAGAGCGCG 1143
Db 1144 AGCTGGGCTCAGCGCGCTGCTCTTCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1203
Qy 1204 CCATGCGCAGCTGCGAGCAGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1231
Db 3326 TGATTCAGGACCACTGCAAGCTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 3353

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RESULT 11
US-10-067-457-4
; Sequence 4, Application US/10067457
; Publication No. US20030082513A1
; GENERAL INFORMATION:
; APPLICANT: Aventis Pharma Deutschland GmbH
; TITLE OF INVENTION: Process for identifying substances which modulate the
; FILE REFERENCE: AVE D-2000/A006
; CURRENT APPLICATION NUMBER: US/10/067,457
; PRIOR FILING DATE: 2002-04-09
; PRIOR FILING DATE: 2001-02-09
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 5065
; TYPE: DNA

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QY 424 TCAGTCCGCTGACTCTCTGCGCGCCGAGTACAGAGAGATCAAGCAGGTGAGCAGT 483
Db 2548 TCAGTCCGCTGACTCTCTGCGCGCCGAGTACAGAGAGATCAAGCAGGTGAGCAGT 2607
QY 484 ACATGTCCTTCCACAGCTGCGAGCTGACTTCCGCGAGAGATCCAGACTATATGAGC 543
Db 2608 ACATGTCCTTCCACAGCTGCGAGCTGACTTCCGCGAGAGATCCAGACTATATGAGC 2667
QY 544 ACCGTTACGAGGAGAGATGTTTGAAGAGACAGATCTGGGAGAGCTCAACGGGCCCC 603
Db 2668 ACCGTTACGAGGAGAGATGTTTGAAGAGACAGATCTGGGAGAGCTCAACGGGCCCC 2727
QY 604 TGGCGGAGAGATGCTCACTCACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 663
Db 2728 TGGCGGAGAGATGCTCACTCACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2787
QY 664 CCAAGCGGAG 723
Db 2788 CCAAGCGGAG 2847
QY 724 AGCGGAG 783
Db 2848 AGCGGAG 2907
QY 784 AGCGGAG 843
Db 2908 AGCGGAG 2967
QY 844 ACTTGGGAG 903
Db 2968 ACTTGGGAG 3027
QY 904 CCTTCTGCGGCTCTTATTCGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 963
Db 3028 CCTTCTGCGGCTCTTATTCGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3087
QY 964 CCAATGATGCGGAG 1023
Db 3088 CCAATGATGCGGAG 3147
QY 1024 AGAATTCATCTCTCTGAG 1083
Db 3148 AGAATTCATCTCTCTGAG 3207
QY 1084 AG 1143
Db 3208 AG 3267
QY 1144 AGTGGGCTCAGCGCGCTGCTCTTCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1203
Db 3268 AGTGGGCTCAGCGCGCTGCTCTTCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 3327
QY 1204 CCATGCGCAGCTGAG 1231
Db 3328 TGATCCAGGAG 3355

RESULT 13

US-09-086-436-32
; Sequence 32, Application US/09086436
; Publication No. US20030118988A1
; GENERAL INFORMATION:
; APPLICANT: Kandel, Eric R.
; APPLICANT: Santoro, Bina
; APPLICANT: Bartsch, Dusan
; APPLICANT: Siegelbaum, Steven
; APPLICANT: Tibbs, Gareth
; APPLICANT: Grant, Seth
; TITLE OR INVENTION: Brain or Heart Cyclic Nucleotide Gated Ion Channel and
; TITLE OR INVENTION: Uses Thereof
; FILE REFERENCE: 0575/54806-A
; CURRENT APPLICATION NUMBER: US/09/086, 436

; CURRENT FILING DATE: 1998-05-28
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 32
; LENGTH: 1512
; TYPE: DNA
; ORGANISM: Murine
US-09-086-436-32
Query Match 65.1%; Score 874.2; DB 10; Length 1512;
Best Local Similarity 88.9%; Pred. No. 2.8e-22;
Matches 945; Conservative 0; Mismatches 118; Indels 0; Gaps 0;
QY 4 TGGGCTTACCAAGATCTCAGGCTCTGCGGCTGCGGCTGCGGCTGCGGCTGCGGCTGCGGCT 63
Db 449 TGGGCTTACCAAGATCTCAGGCTCTGCGGCTGCGGCTGCGGCTGCGGCTGCGGCTGCGGCT 508
QY 64 ACATCCATCAGTGGAGAGATCTTCCATGACATGACATGACATGACATGACATGACATGACATG 123
Db 509 ATATCCACAGTGGAGAGATTTTCCATGACATGACATGACATGACATGACATGACATGACATG 568
QY 124 GATCTGCAATTCATGAGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 183
Db 569 GATCTGCAATTCATGAGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 628
QY 184 TCCGCTGAGCCATGCTGAG 243
Db 629 TCCGCTGAGCCATGCTGAG 688
QY 244 TGAACCACTGAG 303
Db 689 TGAACCACTGAG 748
QY 304 TGTGATCGGGTACGCGCGGAG 363
Db 749 TGTGATCGGGTACGCGCGGAG 808
QY 364 TCGAGATGATGAG 423
Db 809 TCGAGATGATGAG 868
QY 424 TCCAGTGTGAG 483
Db 869 TCCAGTGTGAG 928
QY 484 ACATGTCCTTCCACAGCTGCGAGCTGACTTCCGCGAGAGAGAGAGAGAGAGAGAGAGAGAG 543
Db 929 ACATGTCCTTCCACAGCTGCGAGCTGACTTCCGCGAGAGAGAGAGAGAGAGAGAGAGAGAG 988
QY 544 ACCGTTACGAGGAG 603
Db 989 ACCGTTACGAGGAG 1048
QY 604 TGGCGGAGAGAGATGCTCACTCACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 663
Db 1049 TGGCGGAGAGAGATGCTCACTCACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1108
QY 664 CCAAGCGGAG 723
Db 1109 CCAAGCGGAG 1168
QY 724 AGCGGAGAGAGATGCTCACTCACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 783
Db 1169 AGCGGAGAGAGATGCTCACTCACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1228
QY 784 AGCGGAGAGAGATGCTCACTCACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 843
Db 1229 AGCGGAGAGAGATGCTCACTCACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1288
QY 844 ACTTGGGAGAGATGCTGCTGCTCAACCGGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 903
Db 1289 ACTTGGGAGAGATGCTGCTGCTCAACCGGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1348

QY	904	963
QY	904	963
Db	1339	1401
QY	964	102
Db	1409	1461
QY	1024	1066
Db	1469	1511

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RESULT 14
US-10-753-991-32
; Sequence 32, Application US/10753991
; Publication No. US20040142421A1
; GENERAL INFORMATION:
; APPLICANT: Kandell, Eric R.
; APPLICANT: Santoro, Bina
; APPLICANT: Barsch, Susan
; APPLICANT: Siegelbaum, Steven
; APPLICANT: Tibbs, Gareth
; APPLICANT: Grant, Seth
; TITLE OF INVENTION: Brain or Heart Cyclic Nucleotide Gated Ion Channel and
; TITLE OF INVENTION: Uses thereof
; FILE REFERENCE: 05/54806-A
; CURRENT APPLICATION NUMBER: US/10/753,991
; CURRENT FILING DATE: 2004-01-07
; EARLIER APPLICATION NUMBER: 09/086,436
; EARLIER FILING DATE: 1998-05-28
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 32
; LENGTH: 1512
; TYPE: DNA
; ORGANISM: Murine
US-10-753-991-32

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Query Match	65.1%;	Score 874.2;	DB 19;	Length 1512;
Best Local Similarity	88.9%;	Pred. No. 2.8e-222;		
Matches 945; Conservative	0;	Mismatches 118;	Indels 0;	Gaps 0;

QY	4	TGCGGCTTCCAAAGATCCCTCAGCTCCCTCAGGCTGGCTGGCGCCCTTCACGCTGATTCGGCT	63
Db	449	TGCGCTTCCAAAGATCTCTCAGCTCTGGGCTGGCGGCTATACCGGCTATCCGAT	508
QY	64	ACATCCATATAGTGGGAGGAGATCTTCACATGACCTATGACTCTGGCAGCGGCTGATGA	123
Db	509	ATATCCACCAAGTGGGAAAGATTTTCCATATGACTCAACACTGGCAAGTGAAGTATATG	568
QY	124	GGATCTGCAATCTCATCAGCATGATGATGCTGCTCTGCCATGTGGAGCGGCTGCTCAAT	183
Db	569	GCATCTGTAACCTGATCAGCATGATGATCTACTGCTCTGCACACTGGGACGGTTGGCTCAGT	628
QY	184	TCCTGGTGCCTATGCTGCAGAGACTTCCCGGCACTGCTGGGGTGCATCAATGGGATGG	243
Db	629	TCCTGGTGCCTATGCTGCAGAGACTTCCCGGCACTGCTGGGGTGCATCAATGGGATGG	688
QY	244	TGAACCACTCGTGGAGATGAACTGTACTCTCTGGCACTTTCAAGGCAATGAGCAATGG	303
Db	689	TGAACCACTCGTGGAGAGACTTACTCTGCTGGCGCTCTTCAAGGCAATGAGCAATGG	748
QY	304	TGTGCATCGGGATCGGCGCGGCAAGGCGCCGAGAGCATGACGACATCTGGCTACCATGC	363
Db	749	TGTGCATCGGCTACGGGCGGCAAGGCGCCGAGAGCATGACGACATCTGGCTACCATGC	808
QY	364	TCAGCATGATTTGTGGGTGCCACTGTGTAAGCATGTTCACTGGGCAAGCACTGCCCTCA	423
Db	809	TCAGCATGATTCGTAGGCGGCCACTCTGTATGCCATGTTCACTTTGGGCAAGCACTGCCCTCA	868
QY	424	TCAGTCCGTGAGCTCTTGGCGGCGCAGATCAGAGAGAGTAAAGAGAGTGAAGAGT	483

Db	869	TCGAGTCCCGGAATTCGTCAACGGGCGCCAAATACCAAGGAGGAAGTTCAAACCAAGTATGAGCAAT	928
Qy	484	ACATGATCCTTTCACAACAATCGACAGTGAATCTTCCGCCGAAGATATCAAGATACATATGAGC	543
Db	929	ACATGATCCTTTCACAACAATCGCCGCTGATCTTTCGCCGAAGATATCAAGATTAATATGAAAC	988
Qy	544	ACCGTTTACCAAGGGGAAGAATGTTTGAACGAGACAGCAATCTGGGGGAGACTCAACGGGCCCC	603
Db	989	ACCGTTTACCAAGGGGAAGAATGTCTGATGAGACAGCAATCTTGGGGGAACCTCAACGGGCCAC	1048
Qy	604	TGCGGGAGAGAGATCGTGAATTTCAATTCGCGGAAAGCTGTGGGCTCCATGCGCTGTTTCG	663
Db	1049	TGCGTTAGAGAGATGTGAATTTCAATTCGCGGAAAGCTGTGGGCTTCCATCGCGCTGTTTG	1108
Qy	664	CCAACGCGCAACCCCAACTTGTGTCAACGGCCATATGCTGACCAAGCTCAATGTGAAGGTCTTCC	723
Db	1109	CCAATGCAAGACCCCAATTTGCTTACACAGCAATCTGACCAAAAGCTCAATTTGAGGTCTTCC	1168
Qy	724	AGCCGGGTGACTATATATATCGGCAAGGCACATCGGGAAGAAATGTACTCTTATCCAGC	783
Db	1169	AGCTGTGAGATTATCATCATCTCGAAGGGGAGACATCGGGAAGAAATGATTAATCTATCCAGC	1228
Qy	784	ACGGCGTGTGACGCTGTCTCATTAAGGGCAACAAAGAGATGAAGCTGTCCGATGGCTTCT	843
Db	1229	ATGGGAGTGTATGAGGTGTGTCTACCAAGGGCAACAAAGAGATGAAGCTGTCCGATGGCTTCT	1288
Qy	844	ACTTGGGGAGATTTGCTCTGTCTCACCCGGGGCGCGCAATGGCGCAGCTGTGCGGCTGACA	903
Db	1289	ATTTCGGGGAATTTGCTCTGTCTCACGAGGGGCCGCGCTGACGCCAGGCTGTGAGACTTACA	1348
Qy	904	CTTACTGCGCGCTCTTATTTGCTGAGCGTGTGACAACTTCAACGAGTGTCTGAGAGATGACC	963
Db	1349	CTTACTGCTGCGCTTACTCACTGATGTGTGACAAATTTCAACGAGTGTCTGAGAGAAATACC	1408
Qy	964	CCATGATATCGCGCGGCTTTCGAGACGAGTGGCCATTCAGCCGCTGTGACCGCATTCGGCAGA	1023
Db	1409	CCAATGATATCGCGCGGCTTTCGAGACTGTGGCTATATGACCGGCTGATGATTCGCAATGAGCAGA	1468
Qy	1024	AGAAATTCATCTCTTGACCAAGGTGTGACGATGACCTTCAACTGC	1066
Db	1469	AGAACTCACCTTGCTGTGACCAAGGTGTGACGATGATTCGATGCTC	1511

RESULT 15
US-10-384-107-3

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1 Publication No. US20050003477A1
2
3 GENERAL INFORMATION:
4 APPLICANT: The Trustees of Columbia University
5 APPLICANT: Kandell, Eric R.
6 APPLICANT: Santoro, Bina
7 APPLICANT: Bartsch, Dusan
8 APPLICANT: Siegelbaum, Steven
9 APPLICANT: Tibbs, Gareth
10 APPLICANT: Grant, Seth
11
12 TITLE OF INVENTION: Pacemaker Channel Proteins and Uses Thereof
13
14 FILE REFERENCE: 0575/54806-B
15
16 CURRENT APPLICATION NUMBER: US/10/384,107
17
18 CURRENT FILING DATE: 2003-03-06
19
20 PRIOR APPLICATION NUMBER: 08/997,685
21
22 PRIOR FILING DATE: 1997-12-23
23
24 NUMBER OF SEQ ID NOS: 60
25
26 SOFTWARE: PatentIn version 3.1
27
28 SEQ ID NO 3
29
30 LENGTH: 1584
31
32 TYPE: DNA
33
34 ORGANISM: mouse;
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Search completed: August 31, 2005, 10:02:13
Job time : 4813 secs

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